

# The Professional Manufacturer of Nucleic Acid Extraction



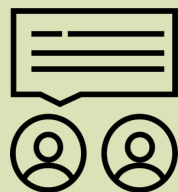
## Product

- Nucleic Acid Extraction Kit
- Silica Membrane/Ion Exchange Column
- Reagent (Tri-RNA Reagent)



## Quality Certification

- ISO13485
- QMS (pending)



## Service

- ODM/OEM/Customize
- Mass Production
- Technical Service

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# Content

Plasmid Extraction Series				
No.	Product Name	Size	Cat. No.	
1	FavorFilter™ Plasmid Extraction Midi/Maxi Kit	25	FAFTE 002	1
		50	FAFTE 002-1	
		4	FAFTE 001	
		10	FAFTE 001-1	
2	FavorFilter™ Endotoxin Free Plasmid Extraction Maxi Kit	4	FAFTE 001-EF	2
		10	FAFTE 001-1-EF	
3	FavorPrep™ Plasmid Extraction Midi/Maxi Kit	25	FAPDE 002	3
		50	FAPDE 002-1	
		10	FAPDE 003	
		20	FAPDE 003-1	
4	FavorPrep™ Endotoxin Free Plasmid Extraction Midi/Maxi Kit	25	FAPDE 002-EF	4
		10	FAPDE 003-EF	
5	FavorPrep™ Plasmid Extraction Maxi Plus Kit	10	FAPMX 010	5
6	FavorPrep™ Endotoxin Free Plasmid Extraction Maxi Plus Kit	10	FAPMX 010-EF	6
7	FavorPrep™ Plasmid Extraction Mini Kit	100	FAPDE 001	7
		300	FAPDE 001-1	
8	FavorPrep™ Plasmid Extraction Mini Kit	100	FAPDE 100	8
		300	FAPDE 300	
Genomic DNA Extraction Series				
No.	Product Name	Size	Cat. No.	
9	FavorPrep™ FFPE Tissue DNA Extraction Micro Kit	50	FAFFM 050B	9
		100	FAFFM 100B	
10	FavorPrep™ Milk Bacterial DNA Extraction Mini Kit	50	FAMBD 001	10
11	FavorPrep™ Soil DNA Isolation Mini Kit	50	FASOI 001	11
		100	FASOI001-1	
12	FavorPrep™ Stool DNA Isolation Mini Kit	50	FASTI 001	12
		100	FASTI 001-1	
13	FavorPrep™ Food DNA Extraction Kit I	50	FDK 1050	13
14	FavorPrep™ Blood Genomic DNA Extraction Mini Kit	50	FABGK 001	14
		100	FABGK 001-1	
		300	FABGK 001-2	
15	FavorPrep™ Blood/Cultured Cell Genomic DNA Extraction Midi/Maxi Kit	25	FABGK 002	15
		10	FABGK 003	
		24	FABGK 003-1	
16	FavorPrep™ Blood/Cultured Cell Genomic DNA Extraction Mini Kit	100	FABGK 100	16
		300	FABGK 300	
17	FavorPrep™ Fungi/Yeas Genomic DNA Extraction Mini Kit	50	FAFYG 001	17
		100	FAFYG 001-1	
18	FavorPrep™ Genomic DNA Clean-Up Kit	50	FAGDC 001	18
		200	FAGDC 001-1	
19	FavorPrep™ Plant Genomic DNA Extraction Mini/Maxi Kit	50	FAPGK 001	19
		100	FAPGK 001-1	
		200	FAPGK 001-2	
		10	FAPGK 002	

20	FavorPrep™ Tissue Genomic DNA Extraction Mini Kit	10	FATGK 001	20
		100	FATGK 001-1	
		300	FATGK 001-2	
21	FavorPrep™ Tissue Genomic DNA Extraction MicroElute Kit	50	FATGM 001B	21
		100	FATGM 001-1B	

## DNA Fragment Extraction Series

No.	Product Name	Size	Cat. No.	
22	FavorPrep™ GEL Purification Mini Kit	50	FAGPK 001	22
		200	FAGPK 001-1	
		300	FAGPK 001-2	
23	FavorPrep™ MicroElute GEL Extraction Kit	50	FAMGK 001B	23
		200	FAMGK 001-1B	
24	FavorPrep™ PCR Clean Up Mini Kit	50	FAPCK 001	24
		200	FAPCK 001-1	
		300	FAPCK 001-2	
25	FavorPrep™ MicroElute PCR Clean Up Kit	50	FAMPK 001B	25
		100	FAMPK 001-1B	
26	FavorPrep™ GEL/PCR Purification Mini Kit	100	FAGCK 001	26
		300	FAGCK 001-1	
27	FavorPrep™ MicroElute GEL/PCR Purification Kit	50	FAEPK 001B	27
		100	FAEPK 001-1B	

## Total RNA Extraction Series

No.	Product Name	Size	Cat. No.	
28	FavorPrep™ Soil/Stool RNA Extraction MicroElute Kit	100	FAFRK001B-MICRO	28
29	FavorPrep™ Total RNA Plus Mini Kit	50	FATRK-P 050	29
		100	FATRK-P 100	
30	FavorPrep™ Tissue Total RNA Mini/Maxi Kit	50	FATRK 001	30
		100	FATRK 001-1	
		300	FATRK 001-2	
		10	FATRK 003	
31	FavorPrep™ Tissue Total RNA MicroElute Kit	50	FATRM 001B	31
		100	FATRM 001-1B	
32	FavorPrep™ Plant Total RNA Mini/Maxi Kit	50	FAPRK 001	32
		100	FAPRK 001-1	
		300	FAPRK 001-2	
		10	FAPRK 002	
33	FavorPrep™ After Tri-Reagent RNA Clean-Up Kit	50	FAATR 001	33
		200	FAATR 001-1	
34	FavorPrep™ Blood/Cultured Total RNA Mini/Maxi Kit	50	FABRK 001	34
		100	FABRK 001-1	
		300	FABRK 001-2	
		10	FABRK 003	
35	FavorPrep™ Total RNA Isolation Kit II	50	FATRS 050	35
		100	FATRS 100	
36	FavorPrep™ Whole Blood RNA Mini Kit	50	FAWBR 050	36
		100	FAWBR 100	

## Viral Nucleic Acid Extraction Series

No.	Product Name	Size	Cat. No.	
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37	FavorPrep™ Viral DNA/RNA Kit	50	FAVNK 001	37
		100	FAVNK 001-1	
		300	FAVNK 001-2	
38	FavorPrep™ Viral Nucleic Acid Extraction Kit II	50	FAVNK 002	38
		100	FAVNK 002-1	
		300	FAVNK 002-2	

## Small Fragment Nucleic Acid Extraction Series

No.	Product Name	Size	Cat. No.	
39	FavorPrep™ miRNA Isolation Kit	100	FAMIK 001	39
		50	FAMIK 002	
40	FavorPrep™ Circulating Nucleic Acid Isolation Kit	50	FACFK 050	40

## 96-Well Plate Extraction Series

No.	Product Name	Size	Cat. No.	
41	FavorPrep™ 96-Well PCR Clean-Up Kit	1	FACKE 96001	41
		2	FACKE 96002	
		4	FACKE 96004	
42	FavorPrep™ 96-Well GEL Purification Kit	1	FAGKE 96001	42
		2	FAGKE 96002	
		4	FAGKE 96004	
43	FavorPrep™ 96-Well GEL/PCR Clean-Up Kit	1	FAPKE 96001	43
		2	FAPKE 96002	
		4	FAPKE 96004	
44	FavorPrep™ 96-Well Genomic DNA Kit	1	FADWE 96001	44
		2	FADWE 96002	
		4	FADWE 96004	
45	FavorPrep™ 96-Well Plant Genomics DNA Extraction Kit	1	FAPGE 96001	45
		2	FAPGE 96002	
		4	FAPGE 96004	
46	FavorPrep™ 96-Well Plasmid DNA Extraction Kit	1	FAPWE 96001	46
		2	FAPWE 96002	
		4	FAPWE 96004	
47	FavorPrep™ 96-Well Total RNA Kit	1	FATRE 96001	47
		2	FATRE 96002	
		4	FATRE 96004	

## Reagent Series

No.	Product Name	Size	Cat. No.	
49	FavorPrep™ Tri-RNA Reagent	100	FATRR 001	49
		50	FATRR 002	
50	FavorPrep™ RNA Stabilization Solution	100	FARSS 001	50





# PLASMID DNA EXTRACTION SERIES

## FavorFilter™ Plasmid Extraction Midi/Maxi Kit (FAFTE)

### Description

The FavorFilter™ Plasmid Extraction Midi/Maxi Kit is designed for rapid and efficient extraction of high-quality plasmid DNA. A special designed filter cartridge is allowed to remove the bacterial lysates without centrifugation step. Following a gravity-flow procedure, the plasmid DNA is bound to the resin, and the contaminants can be removed by wash buffer. The downstream application of FAFTE is suitable for transfection, *in vitro* transcription/translation, and all enzymatic modifications.

### Features

- ★**Time Saving:** Remove bacterial lysates without centrifugation.
- ★**High Purity:** Equal to 2× CsCl gradient centrifugation method.
- ★**Safe:** Eliminate the use of phenol, chloroform, ethidium bromide, and cesium chloride; minimizing exposure to hazardous materials.

### Specifications

**Format/Principle:** Anion-exchange chromatography (Gravity-flow column)

**Lysate Clarification:** Filtration

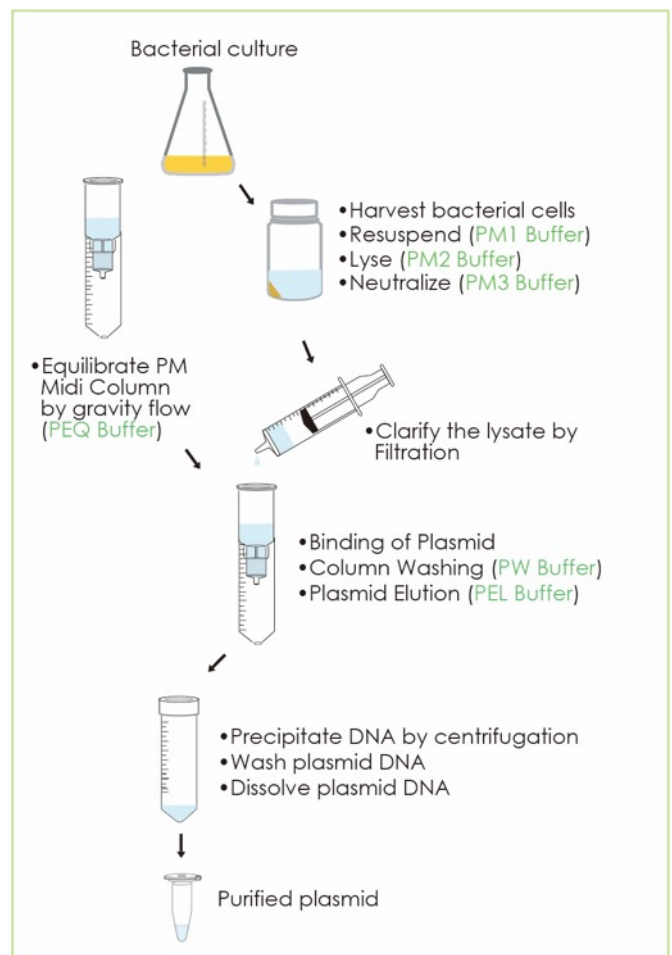
**Sample Size:** Midi: 60~120 ml; Maxi: 120~240 ml of bacterial culture for high/low-copy high-copy number or low-copy number plasmids.

**Plasmid or Constructs Range:** 3 kbp~150 kbp

**Binding Capacity:** 650 µg/Midi Column  
1.5 mg/Maxi Column

### Applications

Transfection; microinjection; *in vitro* transcription; restriction enzyme digestion.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAFTE 001 FAFTE 001-1	FavorFilter™ Plasmid Extraction Maxi Kit	4 preps 10 preps	PEQ Buffer PM1 Buffer PM2 Buffer PM3 Buffer
FAFTE 002 FAFTE 002-1	FavorFilter™ Plasmid Extraction Midi Kit	25 preps 50 preps	PW Buffer PEL Buffer RNase A (Lyophilized) FavorFilter Midi/Maxi Cartridges PM Midi/Maxi Columns

### Procedure

In the process, the cell pellet is resuspended (PM1; RNase A contained), lysed (PM2), and neutralized (PM3). Next, the filter cartridge is used to remove bacterial lysates and obtain cleared sample mixture. Then, the plasmid DNA/buffer mixture bind to the ion exchange resin inside the PM Midi/Maxi Column; the impurities are removed by PW Buffer. Finally, the purified plasmid DNA is eluted using high-salt PEL Buffer and precipitated with isopropanol for desalting.

# PLASMID DNA EXTRACTION SERIES

## FavorFilter™ Endotoxin Free Plasmid Extraction Maxi Kit (FAFTE-EF)

### Description

The FavorFilter™ Endotoxin Free Plasmid Extraction Maxi Kit is designed for the quick isolation of endotoxin-free purified plasmid DNA using anion-exchange technology. This kit uses the FavorFilter™ Maxi Cartridge to clarify the lysate; the gravity-flow column has improved DNA binding capacity. PTR Buffer washes away the endotoxins in just one step. This kit is designed for the convenient, easy, and efficient extraction of pure plasmid DNA and makes the endotoxins less than 0.05 EU/μg DNA that is suitable for the transfection of cultured cells.

### Features

- ★ **Time Saving:** Remove bacterial lysates without centrifugation.
- ★ **High Purity:** Endotoxin <0.05 EU/μg DNA, ideal for endotoxin sensitive applications.
- ★ **Safe:** Eliminate the use of phenol, chloroform, ethidium bromide, and cesium chloride; minimizing exposure to hazardous materials.

### Specifications

**Format/Principle:** Anion-exchange chromatography (Gravity-flow column)

**Lysate Clarification:** Filtration

**Sample Size:** 120~240 ml of bacterial culture for high/low copy number plasmids.

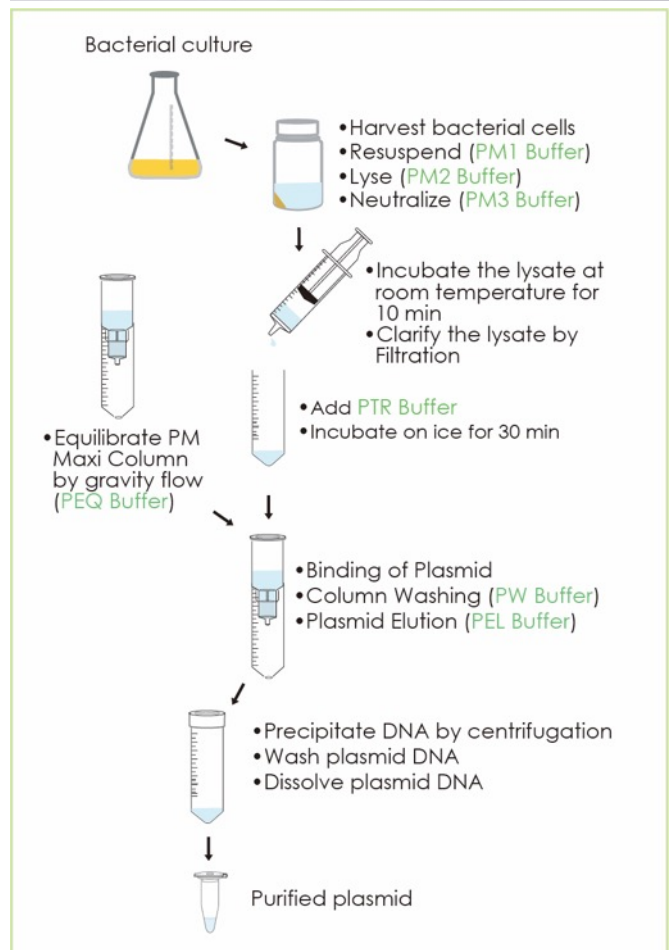
**Plasmid or Constructs Range:** 3 kbp~150 kbp

**Operation Time:** <120 minutes

**Binding Capacity:** 1.5 mg/column

### Applications

Transfection (for endotoxin sensitive cells); microinjection; *in vitro* transcription; *in vitro* transcription; restriction enzyme digestion.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAFTE 001-EF FAFTE 001-1-EF	FavorFilter™ Endotoxin Free Plasmid Extraction Maxi Kit	4 preps 10 preps	PEQ Buffer PM1 Buffer PM2 Buffer PM3 Buffer PTR Buffer PW Buffer PEL Buffer RNase A (Lyophilized) FavorFilter™ Maxi Cartridges PM Maxi Columns

### Procedure

In the process, the cell pellet is resuspended (PM1; RNase A contained), lysed (PM2), and neutralized (PM3). Next, the filter cartridge is used to remove bacterial lysates and obtain cleared sample mixture. Then, the plasmid DNA/buffer mixture binds to the ion exchange resin inside the PM Maxi Column; the impurities are removed by PW Buffer. Finally, the purified plasmid DNA is eluted using high-salt PEL Buffer and precipitated with isopropanol for desalting.

# PLASMID DNA EXTRACTION SERIES

## FavorPrep™ Plasmid Extraction Midi/Maxi Kit (FAPDE)

### Description

The FavorPrep™ Plasmid Extraction Midi/Maxi Kit is designed for the isolation of purified plasmid DNA with anion-exchange technology. This kit uses a gravity-flow column that increases efficiency of DNA binding capacity. This kit is designed for the easy and efficient extraction of pure plasmid DNA. The isolated DNA is ready for enzymatic reactions or molecular biology applications.

### Features

- ★ **High Purity:** High concentration of plasmid DNA which is purified ready for use in molecular biological applications.
- ★ **Safe:** Eliminate the use of phenol, chloroform, ethidium bromide, and cesium chloride; minimizing exposure to hazardous materials.
- ★ **High Yield:** Possess improved material with higher DNA-binding capacity.

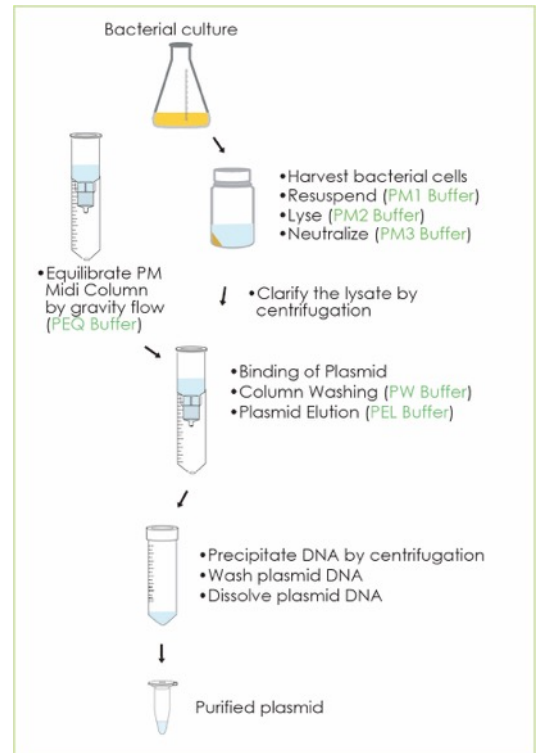
### Applications

Transfection; microinjection; DNA sequencing; PCR; restriction enzyme digestion.



### Specifications

Scale	Midi	Maxi
<b>Features</b>	Anion exchange chromatography (Gravity-flow column)	
<b>Format/Principle</b>	Anion exchange chromatography (Gravity-flow column)	
<b>Sample Size</b> <small>(bacteria for high/low-copy number plasmids)</small>	60~120 ml	120~240 ml
<b>Size of Plasmid or Construct</b>	3 kbp~150 kbp	
<b>Lysate Clarification</b>	Centrifugation	
<b>Column Binding Capacity</b> <small>(µg DNA/column)</small>	<650 µg	<1.5 mg



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAPDE 002	FavorPrep™	25 preps	PEQ Buffer
FAPDE 002-1	Plasmid Extraction Midi Kit	50 preps	PM1 Buffer
			PM2 Buffer
			PM3 Buffer
			PW Buffer
FAPDE 003	FavorPrep™	10 preps	PEL Buffer
FAPDE 003-1	Plasmid Extraction Maxi Kit	20 preps	RNase A (Lyophilized)
			PM Midi/Maxi Columns

### Procedure

In the process, the cell pellet is resuspended (PM1, RNase A contained), lysed (PM2), and neutralized (PM3). Then, the plasmid DNA/buffer mixture binds to the ion exchange resin inside the PM Midi/Maxi Column; the impurities are removed by PW Buffer. Finally, the purified plasmid DNA is eluted using high-salt PEL Buffer and precipitated with isopropanol for desalting.

# PLASMID DNA EXTRACTION SERIES

## FavorPrep™ Endotoxin Free Plasmid Extraction Midi/Maxi Kit (FAPDE-EF)

### Description

The FavorPrep™ Endotoxin Free Plasmid Midi/Maxi Kit is designed for the isolation of endotoxin-free purified plasmid DNA with anion-exchange technology. This kit uses a gravity-flow column that increases efficiency of DNA-binding capacity. PTR Buffer washes away the endotoxins in just one step. This kit is designed for the convenient, easy, and efficient extraction of pure plasmid DNA and makes the endotoxins less than 0.05 EU/μg DNA that is suitable for the transfection of cultured cells.

### Features

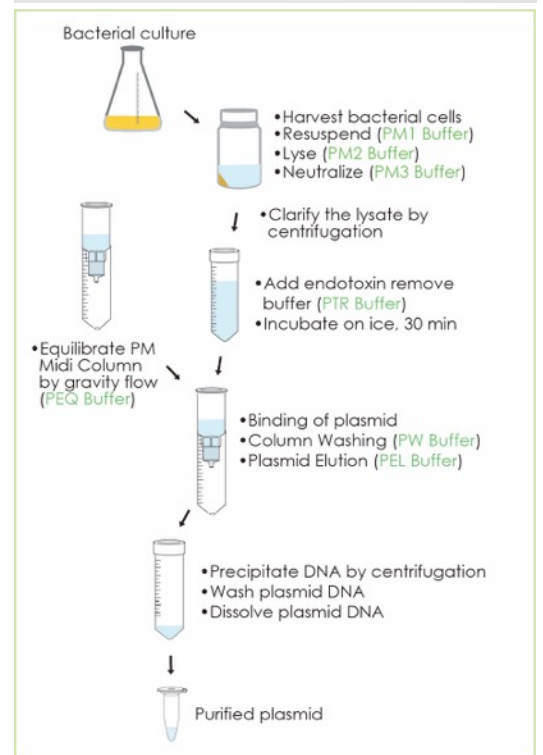
- ★ **High Purity:** Endotoxin <0.05 EU/μg DNA, ideal for endotoxin sensitive applications.
- ★ **Safe:** Eliminate the use of phenol, chloroform, ethidium bromide, and cesium chloride; minimizing expose to hazardous materials.
- ★ **High Yield:** Possess improved material with higher DNA-binding capacity.

### Applications

Transfection; microinjection; DNA sequencing; PCR; restriction enzyme digestion.

### Specifications

Scale	Midi	Maxi
<b>Features</b>	Anion exchange chromatography (Gravity-flow column)	
<b>Format/Principle</b>	Anion exchange chromatography (Gravity-flow column)	
<b>Sample Size</b> (bacteria for high/low-copy number plasmids)	60~120 ml	120~240 ml
<b>Size of Plasmid or Construct</b>	3 kbp~150 kbp	
<b>Lysate Clarification</b>	Centrifugation	
<b>Column Binding Capacity</b> (μg DNA/column)	<650 μg	<1.5 mg



### Ordering information

Cat. No.	Product Name	Size	Contents
FAPDE 002-EF	FavorPrep™ Endotoxin Free Plasmid Extraction Midi Kit	25 preps	PEQ Buffer PM1 Buffer PM2 Buffer PM3 Buffer PTR Buffer
FAPDE 003-EF	FavorPrep™ Endotoxin Free Plasmid Extraction Maxi Kit	10 preps	PW Buffer PEL Buffer RNase A (Lyophilized) PM Midi/Maxi Columns

### Procedure

In the process, the cell pellet is resuspended (PM1; RNase A contained), lysed (PM2), and neutralized (PM3). After centrifugation to clear the lysate, endotoxins are removed using PTR Buffer. Then, the plasmid DNA/buffer mixture binds to the ion exchange resin inside the PM Midi/Maxi Column. The impurities are removed by PW Buffer. Finally, the purified plasmid DNA is eluted using high-salt PEL Buffer and precipitated with isopropanol for desalting.



# PLASMID DNA EXTRACTION SERIES

## FavorPrep™ Plasmid Extraction Maxi Plus Kit (FAPMX)

### Description

The FavorPrep™ Plasmid DNA Extraction Maxi Plus Kit is designed for the isolation of purified plasmid DNA with anion-exchange technology. This kit uses a gravity-flow column that increases efficiency of DNA-binding capacity. This kit is designed for the easy and efficient extraction of pure plasmid DNA. The isolated DNA is ready for enzymatic reactions or molecular biology applications.

### Features

- ★ **High Purity:** High concentration of plasmid DNA which is purified ready for use in molecular biological applications.
- ★ **Safe:** Eliminate the use of phenol, chloroform, ethidium bromide, and cesium chloride; minimizing expose to hazardous materials.
- ★ **High Yield:** Possess improved material with higher DNA-binding capacity.

### Specification

**Format/Principle:** Anion-exchange chromatography (Gravity-flow column)

**Lysate Clarification:** Centrifugation

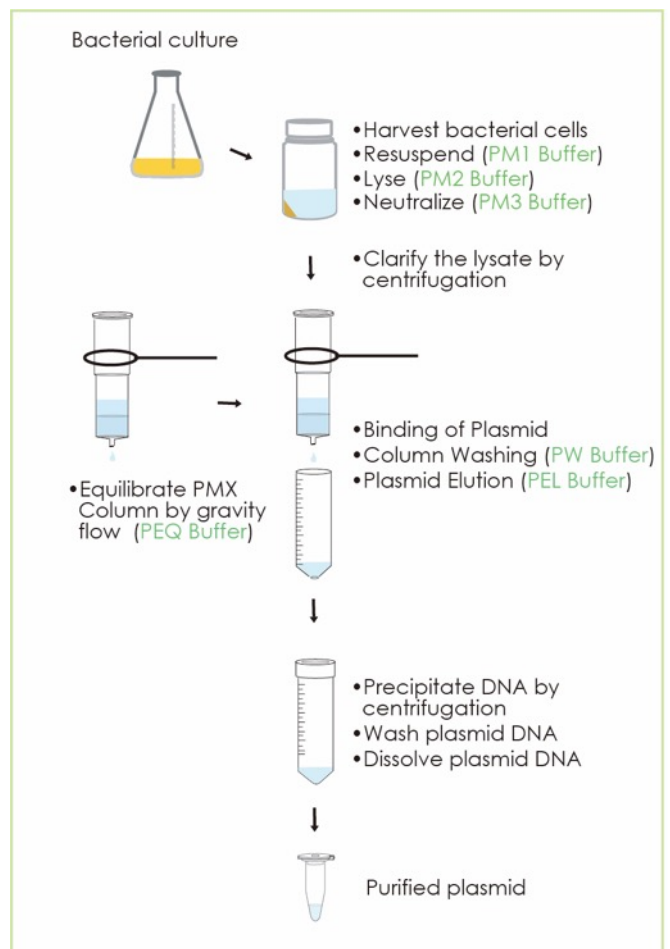
**Sample Size:** 120~240 ml of bacteria culture for high/low-copy number plasmids.

**Size of Plasmid or Construct:** 3 kbp~150 kbp

**Column Binding Capacity:** 1.5 mg DNA/column

### Applications

Transfection; microinjection; DNA sequencing; PCR; restriction enzyme digestion.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAPMX 010	FavorPrep™ Plasmid Extraction Maxi Plus Kit	10 preps	PEQ Buffer PM1 Buffer PM2 Buffer PM3 Buffer PW Buffer PEL Buffer PMX columns RNase A (Lyophilized)

### Procedure

In the process, the cell pellet is resuspended (PM1; RNase A contained), lysed (PM2), and neutralized (PM3). After centrifugation to clear the lysate, plasmid DNA/buffer mixture binding the ion exchange resin inside the PMX Column; the impurities are removed by PW Buffer. Finally, the purified plasmid DNA is eluted using high-salt PEL Buffer and precipitated with isopropanol for desalting.



# PLASMID DNA EXTRACTION SERIES

## FavorPrep™ Endotoxin Free Plasmid Extraction Maxi Plus Kit (FAPMX-EF)

### Description

The FavorPrep™ Endotoxin Free Plasmid Extraction Maxi Plus Kit is designed for the isolation of endotoxin-free purified plasmid DNA with anion-exchange technology. This kit uses a gravity-flow column that increases the efficiency of DNA-binding capacity. PTR Buffer washes away the endotoxins in just one step. This kit is designed for the convenient, easy, and efficient extraction of pure plasmid DNA and makes the endotoxins less than 0.05 EU/μg DNA that is suitable for transfection of cultured cells.

### Features

- ★ **High Purity:** Endotoxin <0.05 EU/μg DNA, ideal for endotoxin sensitive applications.
- ★ **Safe:** Eliminate the use of phenol, chloroform, ethidium bromide, and cesium chloride; minimizing expose to hazardous materials.
- ★ **High Yield:** Possess improved material with higher DNA-binding capacity.

### Specifications

**Format/Principle:** Anion-exchange chromatography (Gravity-flow column)

**Lysate Clarification:** Centrifugation

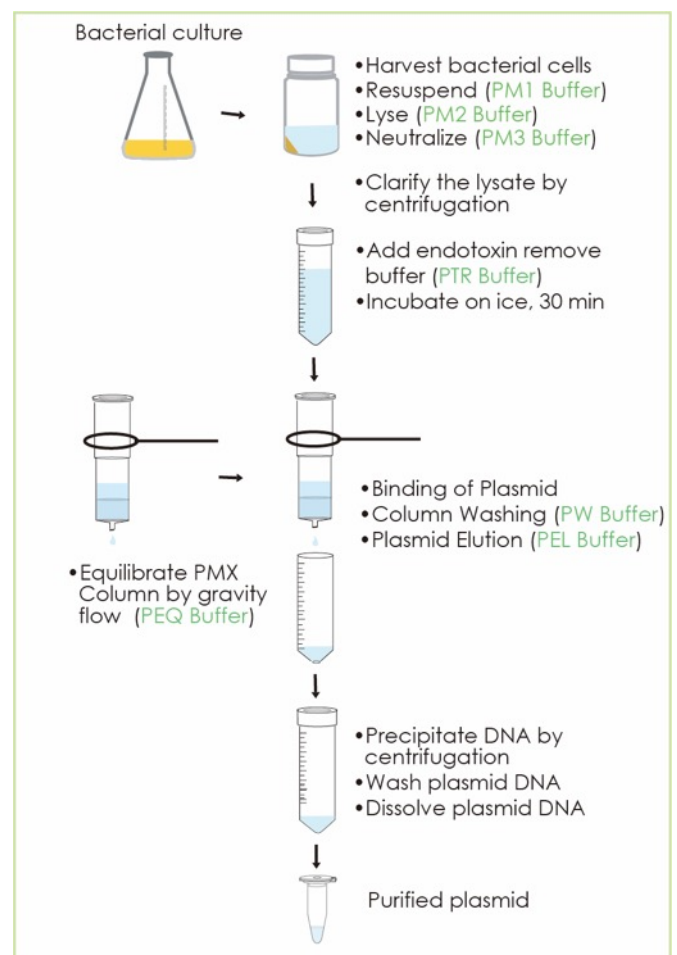
**Sample Size:** 120~240 ml of bacteria for high-copy number or low-copy number plasmid.

**Size of Plasmid or Construct:** 3 kbp~150 kbp

**Column Binding Capacity:** <1.5 mg DNA/column

### Applications

Transfection (for endotoxin sensitive cell); microinjection; DNA sequencing; PCR; restriction enzyme digestion.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAPMX 010-EF	FavorPrep™ Endotoxin Free Plasmid Extraction Maxi Plus Kit	10 preps	PEQ Buffer PM1 Buffer PM2 Buffer PM3 Buffer PW Buffer PTR Buffer PEL Buffer PMX Columns RNase A (Lyophilized)

### Procedure

In the process, the cell pellet is resuspended (PM1; RNase A contained), lysed (PM2), and neutralized (PM3). After centrifugation to clear the lysate, endotoxins are removed using PTR Buffer. Then, the plasmid DNA/buffer mixture bind to the ion exchange resin inside the PMX Column. The impurities are removed by PW Buffer. Finally, the purified plasmid DNA is eluted using high-salt PEL Buffer and precipitated with isopropanol for desalting.

# PLASMID DNA EXTRACTION SERIES

## FavorPrep™ Plasmid Extraction Mini Kit (FAPDE)

### Description

The FavorPrep™ Plasmid Extraction Mini Kit provides a rapid, phenol-free method for the extraction of high-purity plasmid DNA from bacterial culture such as *E. coli*. Silica membrane based DNA column is utilized in the purification process, and the extraction is carried out in three simple steps: binding/washing/elution. The plasmid DNA bound to the silica membrane, and the contaminants can be removed by wash buffer. The extracted DNA can be used in a variety of applications such as PCR, cloning, sequencing, *in vitro* transcription, and labeling.

### Features

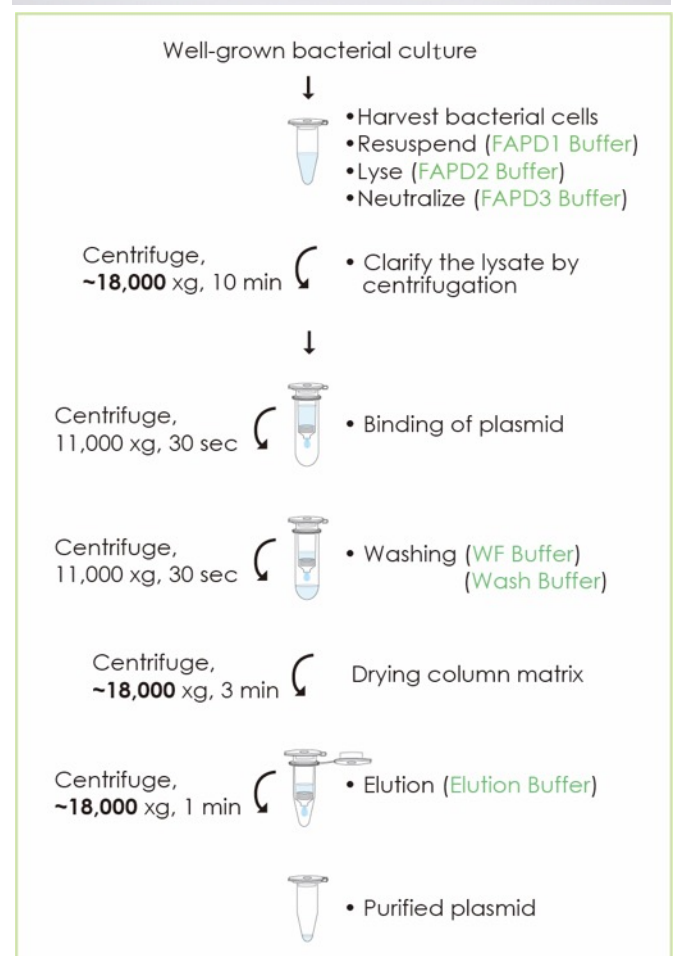
- ★ **Efficient:** High yield efficiency of plasmid DNA (up to 30 µg) from 1~5 ml of overnight cultures.
- ★ **Convenient:** No need for phenol, chloroform, and alcohol precipitation; minimizing expose to hazardous materials.
- ★ **High Quality:** Optimized buffers are included for maximum of DNA purity and yield.

### Specifications

- Format/Principle:** Mini spin column (silica matrix)
- Sample Size:** 1~5 ml of bacterial culture for high/low-copy number plasmids.
- Size of Plasmid or Construct:** <15 kbp
- Operation Time:** <25 minutes
- Typical Yield:** 25~40 µg
- Column Binding Capacity:** ≤ 60 µg DNA per column
- Column Applicability:** Centrifugation

### Applications

Molecular cloning, DNA sequencing; restriction enzyme digestion; ligation and transformation; library screening.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAPDE 001 FAPDE 001-1	FavorPrep™ Plasmid Extraction Mini Kit	100 preps 300 preps	FAPD1 Buffer FAPD2 Buffer FAPD3 Buffer WF Buffer (Concentrate) Wash Buffer (Concentrate) Elution Buffer RNase A (Lyophilized) FAPD Columns Collection Tubes

### Procedure

In the process, 1~5 ml of bacterial culture is pelleted, then resuspended (FAPD1; RNase A contained), lysed (FAPD2), and neutralized (FAPD3). The modified alkaline lysis method and RNase A treatment are used for creating cleared cell lysates with minimal genomic DNA and RNA contaminants. In the presence of a chaotropic salt, the plasmid DNA in the lysate binds to the glass fiber matrix in the spin column. Impurities and other unwanted particles are removed in the washing steps with WF Buffer and Wash Buffer. The purified plasmid DNA is eluted by elution buffer or water.

# PLASMID DNA EXTRACTION SERIES

## FavorPrep™ Plasmid Extraction Mini Kit (FAPDE, Fast)

### Description

The FavorPrep™ Plasmid Extraction Mini Kit is designed for the quick isolation of pure plasmid DNA from small-sized samples. This kit contains an improved spin column with silica matrix that has higher DNA-binding capacity. This kit is designed for the easy, fast, and small-scale extraction of pure plasmid DNA, with a time-saving protocol. The isolated DNA is ready for enzymatic reaction or molecular biology applications.

### Features

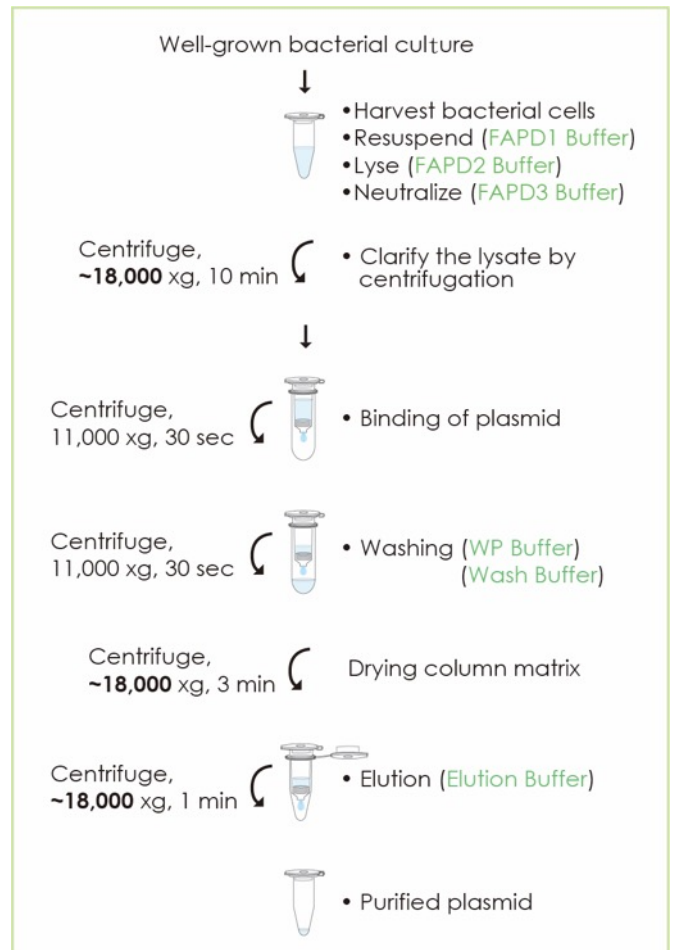
- ★**Easy to Use:** Sequencing-grade plasmid DNA for any kinds of enzymatic reaction.
- ★**Time Saving:** Rapid plasmid isolation procedure within 20 mins.
- ★**High Quality:** Optimized buffers are included for DNA purification.

### Specifications

- Format/Principle:** Mini spin column (silica matrix)
- Sample Size:** 1~3 ml of bacteria for high/low-copy number plasmids.
- Size of Plasmid or Construct:** <15 kbp
- Operation Time:** <20 min
- Typical Yield:** 20~30 µg
- Column Binding Capacity:** ≤60 µg DNA per column
- Column Applicability:** Centrifugation

### Application

Molecular cloning, DNA sequencing; restriction enzyme digestion; ligation and transformation; library screening.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAPDE 100 FAPDE 300	FavorPrep™ Plasmid Extraction Mini Kit	100 preps 300 preps	FAPD1 Buffer FAPD2 Buffer FAPD3 Buffer WP Buffer Wash Buffer (Concentrate) Elution Buffer FAPD Columns Collection Tubes RNase A (Lyophilized)

### Procedure

In the process, 1~3 ml of bacterial culture is pelleted, then resuspended (FAPD1; RNase A contained), lysed (FAPD2), and neutralized (FAPD3). The modified alkaline lysis method and RNase A treatment are used for creating cleared cell lysate with minimal genomic DNA and RNA contaminants. In the presence of a chaotropic salt, the plasmid DNA in the lysate binds to the glass fiber matrix in the spin column. Impurities and other unwanted particles are removed with the washing steps with WF Buffer and Wash Buffer. The purified plasmid DNA is eluted by elution buffer or water.

# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ FFPE Tissue DNA Extraction Micro Kit (FAFFM)

### Description

The FavorPrep™ FFPE Tissue DNA Extraction Micro Kit is specially designed for the DNA extraction from paraffin-fixed tissues. The TG Micro Column allows a minimum elution volume at 10 µl to ensure high eluted DNA concentration. The extraction method of this kit is efficient and easy to operate.

### Features

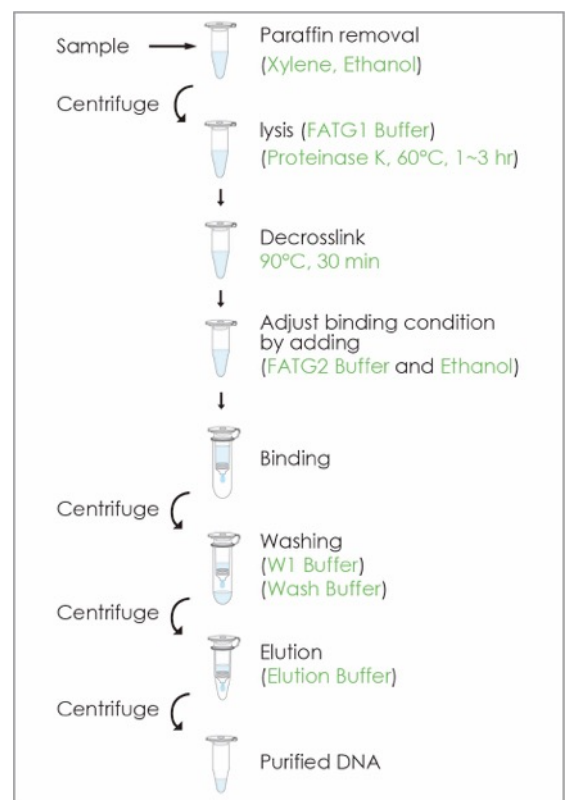
- ★**Easy to Use:** Chaotropic salt buffer technology has two application, cell lysis and DNA-binding of spin-column.
- ★**Time Saving:** A time-efficient method is used to extract application-ready genomic DNA.
- ★**Yield Concentrated DNA:** Effectively reduce elution volume to 10 µl.

### Specifications

- Format/Principle:** Micro spin column (silica matrix)
- Minimum Elution Volume:** 10~12 µl
- Sample Size:** FFPE fixed tissue ≤25 mg (4~8 fragments, 10 µm thick)
- Operation Time:** 2~4 hours
- Column Binding Capacity:** 5 µg DNA/column
- Column Applicability:** Centrifugation

### Applications

Medicolegal analysis; PCR and real time PCR; southern blotting; SNP genotyping; AFLP/PADP; RFLP; next-generation sequencing; micro-array assay.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAFFM 050B	FavorPrep™	50 preps	FATG1 Buffer FATG2 Buffer W1 Buffer (Concentrate) Wash Buffer (Concentrate) Elution Buffer Proteinase K TG Micro Columns Collection Tubes Elution Tubes
FAFFM 100B	FFPE Tissue DNA Extraction Micro Kit	100 preps	

### Procedure

First, the tissue sample penetrated in paraffin is deparaffinized by xylene. After deparaffinization, xylene is replaced with 100% ethanol. Then, deparaffinized tissue sample is enzymatically digested (proteinase K) and lysed (FATG1 Buffer). Next, adjust column binding condition by adding FATG2 Buffer and ethanol. Subsequently, W1 & Wash buffer removes contaminants including salts, metabolites, nucleases and other body-fluid components. Finally, the concentrated DNA is eluted by elution buffer or water in minimum volume.



# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Milk Bacterial DNA Extraction Kit (FAMBD)

### Description

The FavorPrep™ Milk Bacterial DNA Extraction Kit provides a rapid enzymatic method and special chaotropic salt buffer to purify genomic DNA from both Gram-negative and Gram-positive bacteria in low bacterial densities of milk samples. High quality DNA is free of inhibitors and ready-to-use for downstream applications.

### Features

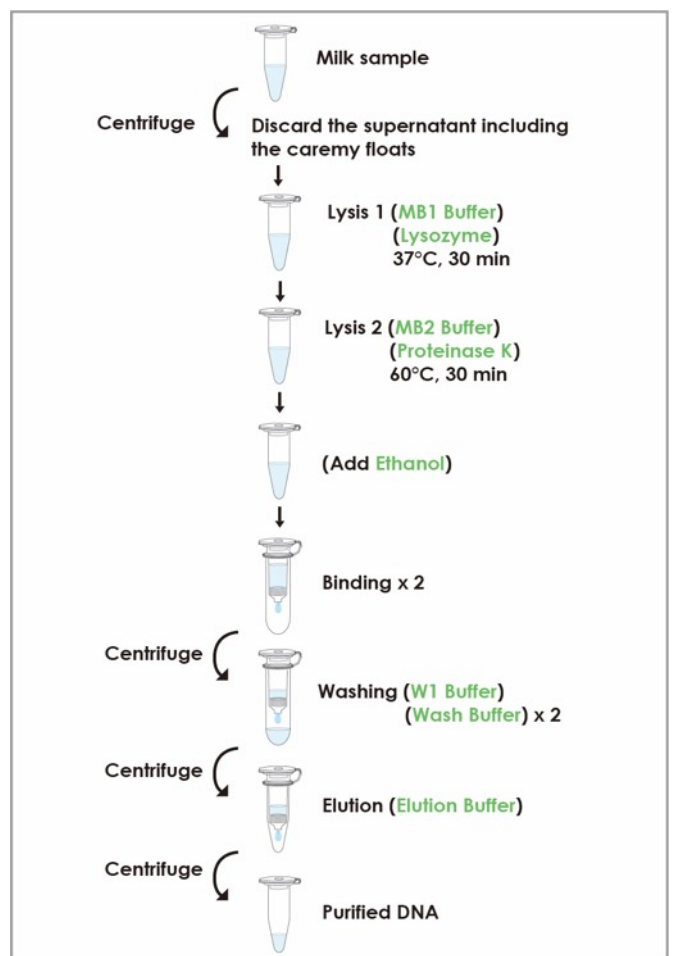
- ★ **High Quality DNA:** Inhibitor-free and ready-to-use in all molecular biology applications.
- ★ **Safe Use:** Phenol/chloroform-free extraction method.
- ★ **Easy and Fast:** Fast and efficient spin-column format.

### Specifications

- Format/Principle:** Mini spin column (silica matrix)
- Sample Size:** Up to 1 ml milk
- Operation Time:** <75 mins
- Binding Capacity:** ≤60 µg / column
- Column Applicability:** Centrifugation

### Applications

PCR; qPCR; southern blotting; DNA sequencing; micro-array.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAMBD 001	FavorPrep™ Milk Bacterial DNA Extraction Kit	50 preps	Lysis Buffer MB1 Lysis Buffer MB2 W1 Buffer (Concentrate) Wash Buffer (Concentrate) Elution Buffer Lysozyme Proteinase K Binding Column W4 Collection Tubes

### Procedure

In the process, centrifugation is performed to pellet bacteria and curdle milk. Resuspending pellet uses Lysis Buffer MB1 and lysozyme solution to break down the bacterial cell wall (Lysis 1 step). After the Lysis 1 step, the lysate is treated by Lysis Buffer MB2 and Proteinase K (Lysis 2 step). Then, adjust binding condition by adding ethanol to make the lysate bound to the column. Impurities and other unwanted particles are removed in washing steps. Finally, the purified DNA is eluted by Elution Buffer or water.



# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Soil DNA Isolation Mini Kit (FASOI)

### Description

The FavorPrep™ Soil DNA Isolation Mini Kit is designed for the isolation of total DNA from soil sample. The inhibitors of downstream PCR or enzymatic reactions will be removed with the sequent buffers in this kit. Phenol/chloroform is not required in the whole procedure; all operation can be finished within 60 minutes. The purified DNA is ready-to-use for downstream applications.

### Features

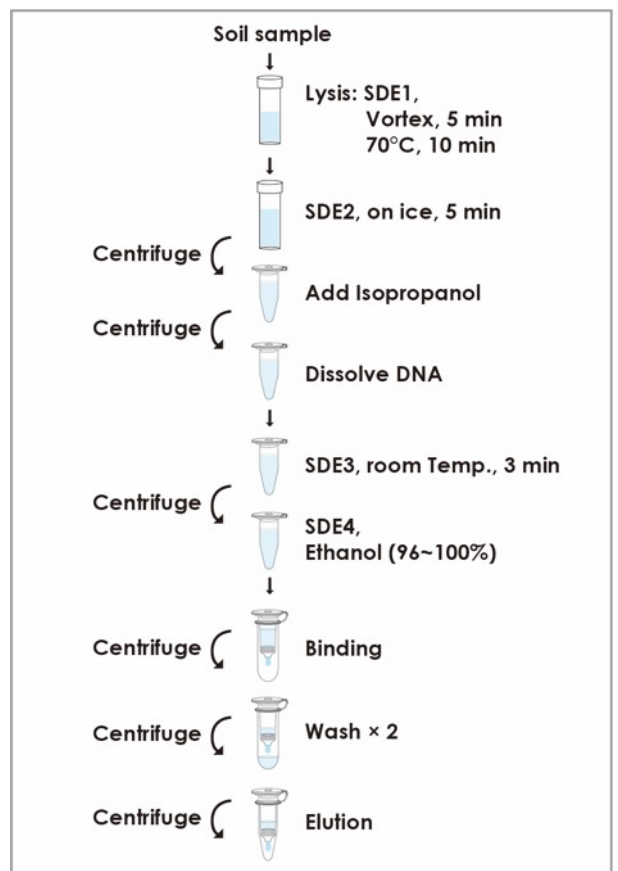
- ★ **Time Saving:** Rapid isolation of ready-to-use DNA within 60 minutes without phenol/chloroform.
- ★ **High Purity:** Eliminate humic acid, polysaccharides, phenol compounds, and enzyme inhibitor from soil sample.
- ★ **Convenience:** Obtain high-quality DNA; ready to use in downstream applications.
- ★ **Easy to Use:** Fast extraction with beads beating without sample grinding.

### Specification

- Format/Principle:** Spin column (silica membrane)
- Sample Size:** 0.25~0.5 g
- Operation Time:** <60 minutes
- Elution Volume:** 50~200 µl

### Applications

PCR, real-time PCR; infectious disease research; NGS.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FASOI 001 FASOI 001-1	FavorPrep™ Soil DNA Isolation Mini Kit	50 preps 100 preps	SDE1 Buffer SDE2 Buffer SDE3 Buffer SDE4 Buffer Wash Buffer (Concentrate) Elution Buffer SDE Mini Columns Collection Tubes Elution Tubes Bead Tubes with Glass Beads

### Procedure

In this simple and rapid process, the soil samples are homogenized and lysed by the buffers containing glass beads and detergent (SDE1 and SDE2). After adding isopropanol for DNA precipitation and DNA dissolving, SDE3 and SDE4 Buffers help removing debris, proteins, and polysaccharides from soil samples. Then, the silica membrane-binding/washing steps will make sure the impurities are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or water.

# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Stool DNA Isolation Mini Kit (FASTI)

### Description

The FavorPrep™ Stool DNA Isolation Mini Kit is designed for the isolation of high-quality total DNA from 50~200 mg of fresh or frozen stool samples. The inhibitors, such as polysaccharides and humic acid, will be removed with the sequent buffers in this kit. Eluted DNA is ready-to-use for downstream applications.

### Features

- ★ **Time Saving:** Rapid isolation of ready-to-use DNA within 60 minutes without phenol/chloroform.
- ★ **High Purity:** Eliminate humic acid and high concentration of PCR inhibitors from stool samples.
- ★ **Convenience:** Obtain high-quality DNA; ready to use in downstream applications.
- ★ **Easy to Use:** Rapid extraction with beads beating without sample grinding.

### Specifications

**Format/Principle:** Spin column (silica membrane)

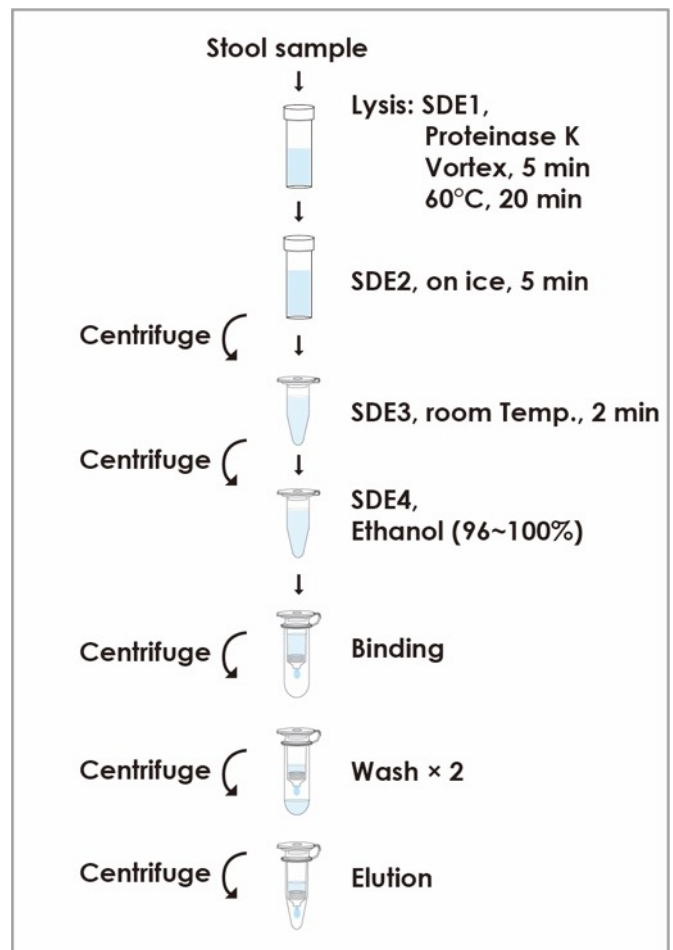
**Sample Size:** 50~200 mg

**Operation Time:** <60 minutes

**Elution Volume:** 50~200 µl

### Applications

PCR; real-Time PCR; disease research; microarray; genotyping.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FASTI 001 FASTI 001-1	FavorPrep™ Stool DNA Isolation Mini Kit	50 preps 100 preps	SDE1 Buffer SDE2 Buffer SDE3 Buffer SDE4 Buffer Wash Buffer (Concentrate) Elution Buffer Proteinase K SDE Mini Columns Collection Tubes Elution Tubes Bead Tubes with Glass Beads

### Procedure

In this simple and rapid process, the stool samples are homogenized and lysed by the buffers containing glass beads and detergent (SDE1 and SDE2). SDE3 and SDE4 Buffers help removing debris, proteins, and polysaccharides from stool samples. Then, the silica membrane-binding/washing steps will make sure the impurities are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or water.

# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Food DNA Extraction Kit I (FDK)

### Description

FavorPrep™ Food DNA Extraction Kit I is designed for rapid extraction of pure genomic DNA from a wide range of food sample types. The impurities (proteins, lipids and other organic compounds) can be removed by the washing steps. High recovery rate of short DNA fragments from processed food samples which is subjected to heat, irradiation and high pressure is executed with optional steps. The purified DNA is ready-to-use for downstream applications.

### Features

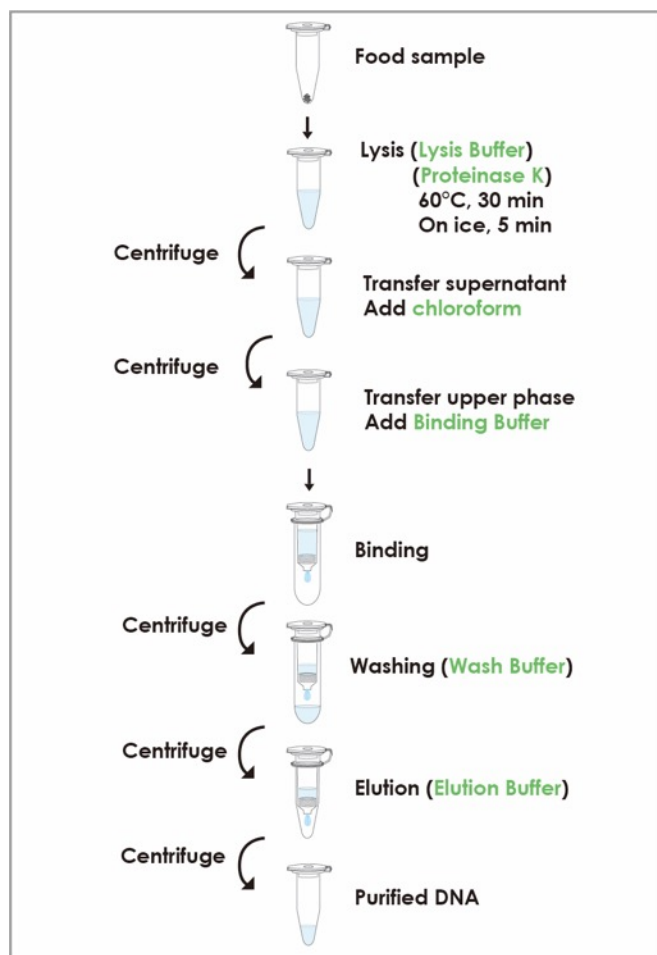
- ★**High Purity:** Complete removal of PCR inhibitors.
- ★**Time Saving:** <60 minutes.
- ★**Versatile:** Wide compatibility with a variety of food products.
- ★**Easy to Use:** With chaotropic salt buffer technology for cell lysis and convenient spin-columns.

### Specifications

- Format/Principle:** Spin column (silica membrane)
- Sample Size:** 200 mg to 2 g
- Operation Time:** <60 mins
- Binding Capacity:** ≤60 µg/column
- Column Applicability:** Centrifugation

### Applications

PCR; qPCR; Southern blotting; DNA sequencing; micro-array.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FDK 1050	FavorPrep™ Food DNA Extraction Kit I	50 preps	Lysis Buffer Binding Buffer Wash Buffer (Concentrate) Proteinase K Elution Buffer Binding Columns Collection Tubes

### Procedure

The method uses Lysis Buffer and Proteinase K to lyse cell and degrade protein. After lysis, the lysate is cleared by centrifugation and the debris is removed. The clear supernatant is then mixed with the Binding Buffer to create optimal binding conditions for the binding of DNA and silica membrane. After washing off the contaminants with wash buffer, the purified DNA is eluted by low-salt elution buffer or water.

# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Blood Genomic DNA Extraction Mini Kit (FABGK)

### Description

The FavorPrep™ Blood Genomic DNA Extraction Mini Kit is designed for rapid extraction of pure genomic DNA from a varied range of sample types. It is also intended for the extraction of viral DNA (e.g., HBV) from blood samples. Silica membrane-based column is utilized for DNA binding. The purified DNA is ready-to-use in multiple applications, such as PCR, qPCR and library preparation in NGS sequencing.

### Features

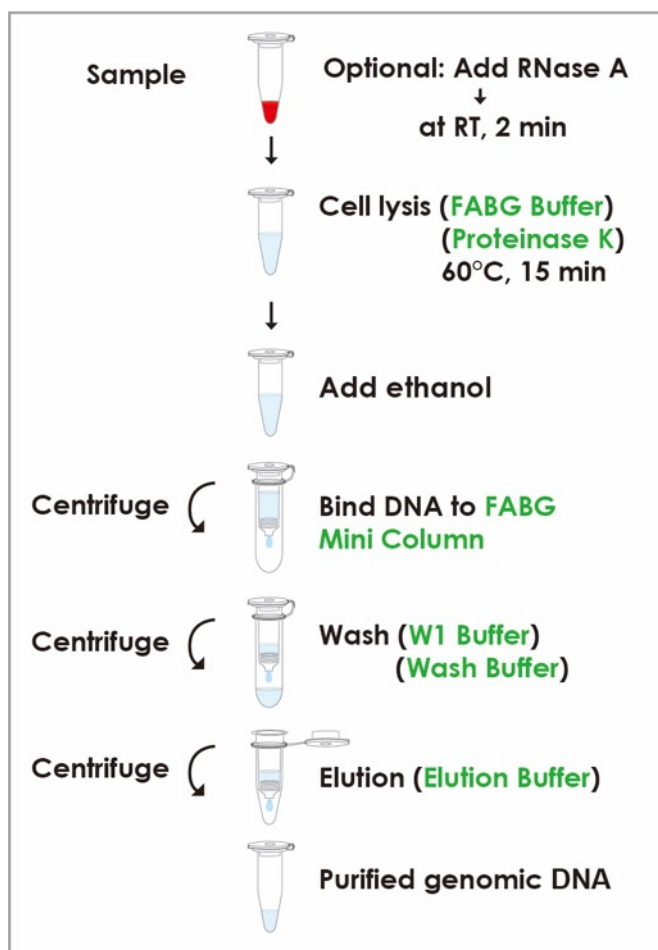
- ★**High Purity:** A260/280≥1.8; A230/260≥2.0
- ★**Safe:** No phenol/chloroform extraction or ethanol precipitation steps.
- ★**Time Saving:** <30 minutes.
- ★**Versatile:** Extraction of genomic DNA from whole blood, plasma, serum, buffy coat, body fluids, lymphocytes, cultured cells and bacterial cells.

### Specifications

- Format/Principle:** Spin column (silica matrix)
- Binding Capacity:** Up to 60 µg DNA/column
- Typical Yield:** 4~8 µg per 200 µl whole blood
- Elution Volume:** 50~200 µl
- Sample Size:** Up to 5×10<sup>6</sup> cultured cells; up to 200 µl whole blood, serum, plasma or body fluids.

### Applications

PCR; qPCR; southern blotting; medicolegal analysis; NGS.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FABGK 001	FavorPrep™	50 preps	FABG Buffer
FABGK 001-1	Blood Genomic DNA	100 preps	W1 Buffer (Concentrate)
FABGK 001-2	Extraction Mini Kit	300 preps	Wash Buffer (Concentrate)
			Elution Buffer
			Proteinase K
			FABG Mini Columns
			Collection Tubes
			Elution Tubes

### Procedure

The method uses proteinase K and chaotropic salt-guanidine hydrochloride (FABG) to lyse cells and degrade protein. Then, DNA in chaotropic salt is bounded to glass fiber matrix of column. After washing off the contaminants, the purified DNA is eluted by low-salt elution buffer or water.



# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Blood/Cultured Cell Genomic DNA Extraction Midi/Maxi Kit (FABGK)

### Description

The FavorPrep™ Blood/Cultured Cell Genomic DNA Extraction Midi/Maxi Kit is designed for the purification of total DNA (including genomic, mitochondrial, and viral DNA) from large volumes of blood sample or cultured cells. A safe protocol that eliminates the use of organic solvents such as phenol and chloroform is performed. By using proteinase K and lysis buffer, the kit effectively lyses cells and degrades protein. The purified DNA is suitable for downstream applications, such as PCR or other enzymatic reactions.

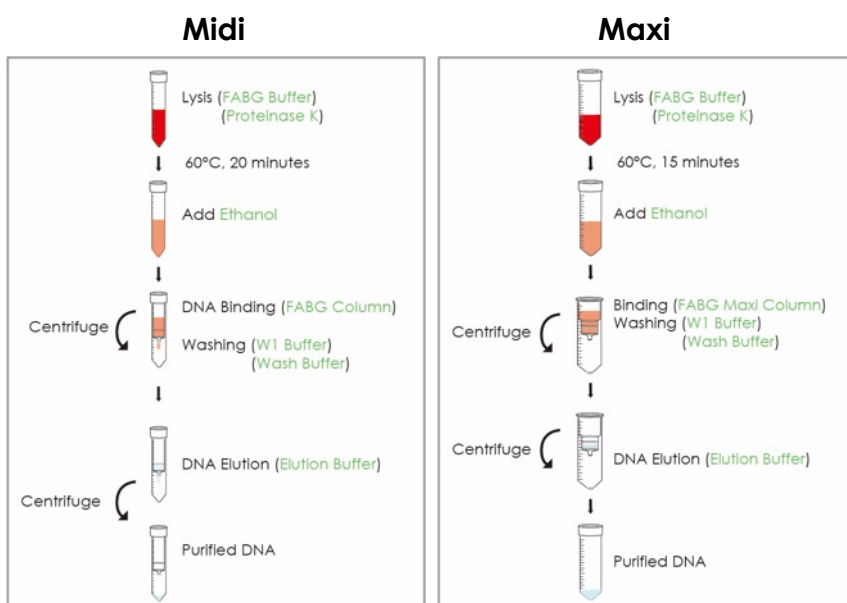


### Features

- ★**High Purity:** The extracted DNA is suitable for various applications, including amplification, enzyme digestion, PCR, etc.
- ★**High Speed:** Rapid isolation of genomic DNA from blood within 60 minutes.
- ★**Easy to Use:** Base on a five-steps process to obtain high-purity genomic DNA.
- ★**Safe to Use:** Use the spin column tube which can remove impurities. No caustic organic compound.

### Applications

PCR; realtime PCR; southern blotting; AFLP; RLFP.



### Specifications

		Scale	Midi	Maxi
<b>Features</b>				
<b>Format/Principle</b>			Spin column (Silica matrix)	
<b>Sample Size</b>	<b>fresh / frozen blood</b>		Up to 1.5 ml	Up to 10 ml
	<b>cultured cells</b>		Up to 6×10 <sup>7</sup>	Up to 1×10 <sup>8</sup>
<b>Column Capacity</b>			150 µg	500 µg
<b>Average DNA Yield</b>			35 µg / 1 ml whole blood	
<b>Handling Time</b>			1 hour	
<b>Elution Volume</b>			1 ml	0.75~1.5 ml



### Ordering Information

Cat. No.	Product Name	Size	Contents
FABGK 002	FavorPrep™ Blood/Cultured Cell Genomic DNA Extraction Midi Kit	25 preps	W1 Buffer (Concentrate) Wash Buffer (Concentrate) FABG Buffer Elution Buffer Proteinase K
FABGK 003 FABGK 003-1	FavorPrep™ Blood/Cultured Cell Genomic DNA Extraction Maxi Kit	10 preps 24 preps	FABG Midi/Maxi Columns Elution Tubes (Midi: 15 ml Tube; Maxi: 50 ml Tube)

### Procedure

The method uses proteinase K and chaotropic salt-guanidine hydrochloride (FABG) to lyse cells and degrade protein. Then, genomic DNA is bounded to glass fiber matrix of the column. Impurities and other unwanted particles are removed in the washing steps with W1 and Wash buffer. The purified plasmid DNA is eluted by elution buffer or water.



# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Blood/Cultured Cell Genomic DNA Extraction Mini Kit (FABGK)

### Description

The FavorPrep™ Blood/Cultured Cell Genomic DNA Extraction Mini Kit is an efficient and easy-to-use kit for extraction of pure genomic DNA from mammalian blood and cultured cells. This kit is specially designed to isolate blood genomic DNA by removing red blood cells with effective RBC Lysis Buffer. The high quality of genomic DNA is ready-to-use in multiple applications, such as qPCR and NGS library preparation.

### Features

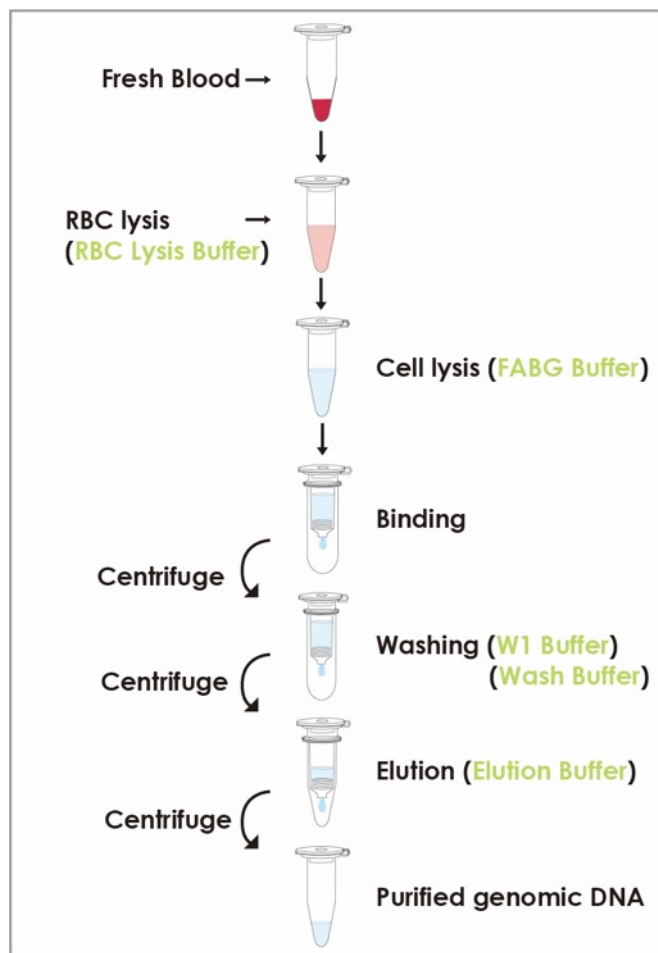
- ★**High Purity:** Purified DNA is suitable for a variety of applications, including DNA amplification, digestion, PCR, etc.
- ★**Versatile:** Extraction of genomic DNA from fresh/frozen blood, buffy coat, lymphocytes, cultured cells, and bacteria/fungus cells.
- ★**Easy to Use:** Base on a five-steps process to obtain high-purity genomic DNA.
- ★**Safe to Use:** No caustic organic compound.

### Specifications

- Format/Principle:** Mini spin column (Silica matrix)
- Binding Capacity:** Up to 50 µg DNA/column
- DNA Size:** 200 bp~50 kbp
- Typical Yield:** 15~35 µg/prep
- Column Applicability:** Centrifugation and vacuum
- Minimum Elution Volume:** 50 µl
- Sample Size:**
  - Up to 300 µl of whole blood
  - Up to 200 µl of frozen blood
  - Up to 200 µl of buffy coat
  - Up to 1x10<sup>7</sup> of cultured animal cells
  - Up to 1x10<sup>9</sup> of cultured bacterial cells
  - Up to 5x10<sup>7</sup> of fungus cells

### Application

PCR; qPCR; Southern blotting; medicolegal analysis.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FABGK 100	FavorPrep™ Blood/Cultured Cell Genomic DNA Extraction Mini Kit	100 preps	RBC Lysis Buffer FATG Buffer FABG Buffer W1 Buffer Wash Buffer (Concentrate) Elution Buffer FABG Mini Columns Collection Tubes
FABGK 300		300 preps	

### Procedure

The method uses RBC Lysis Buffer and chaotropic salt-guanidine hydrochloride (FATG2) to lyse cells and degrade protein. Then, the binding and washing steps (W1 Buffer and Wash Buffer) will make sure that DNA is bound to silica membrane and the impurities are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or water.

# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Fungi/Yeast Genomic DNA Extraction Mini Kit (FAFYG)

### Description

The FavorPrep™ Fungi/Yeast Genomic DNA Extraction Mini Kit is designed for the purification of DNA from fungus and yeast cells. The enzyme treatment (lyticase & proteinase K) and bead-beating homogenization are applied to lyse samples efficiently and improving DNA yield. This kit provides the most complete and effective method to extract application-ready pure genomic DNA from fungi and yeast samples.

### Features

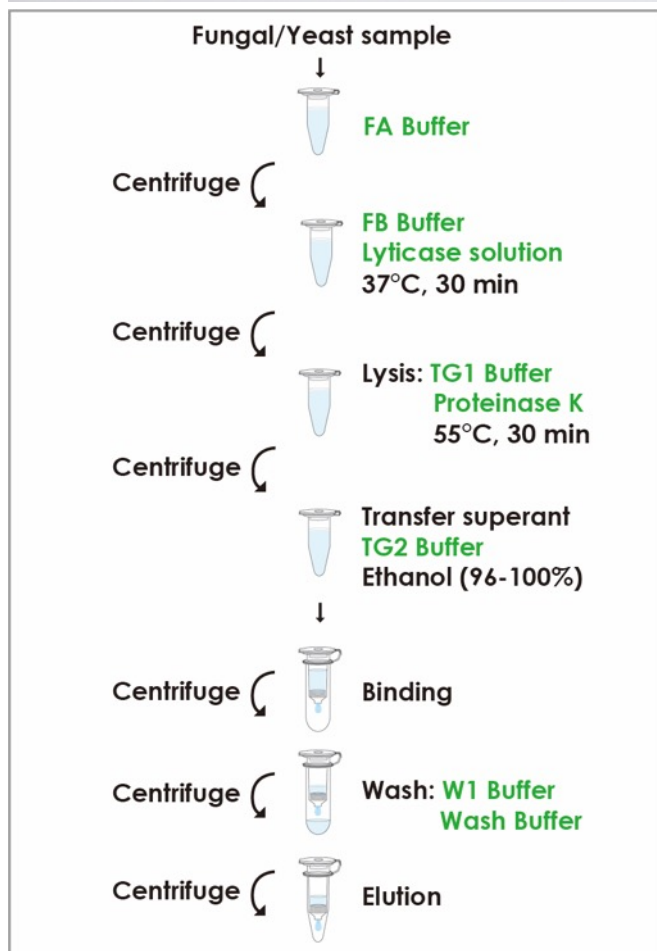
- ★ **Time Saving:** Rapid isolation of ready-to-use DNA within 60 minutes; no phenol/chloroform.
- ★ **High Purity:** Purified DNA is suitable for a variety of applications, including DNA amplification, enzyme digestion, PCR, etc.
- ★ **Convenience:** High-quality DNA; ready-to-use in downstream applications.
- ★ **Easy to Use:** Rapid extraction by beads-beating without sample grinding.

### Specifications

- Format/Principle:** Mini spin column (silica matrix)
- Sample Size:** 1~5×10<sup>6</sup>
- Operation Time:** Within 60 minutes
- Binding Capacity:** 60 µg/column
- Column Applicability:** Centrifugation and vacuum

### Applications

PCR; qPCR; Southern blotting; AFLP; RFLP/PADP.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAFYG 001 FAFYG 001-1	FavorPrep™ Fungi/ Yeast Genomic DNA Extraction Mini Kit	50 preps 100 preps	Beads Tubes FA Buffer FB Buffer TG1 Buffer TG2 Buffer W1 Buffer (Concentrate) Wash Buffer (Concentrate) Elution Buffer Lyticase Solution Proteinase K TG Mini Columns Collection Tubes Elution Tubes

### Procedure

In this simple and rapid process, the fungi or yeast sample is homogenized and lysed by the FA Buffer contained glass beads. After centrifuging, the sequential enzymatic treatment (FB buffer and lyticase; TG1 Buffer and proteinase K; TG2 Buffer and ethanol) destroys the cell wall of sample. Then the DNA is bound to the silica membrane of spin column by flowing through of the sample mixture. After two washing steps (W1 Buffer and Wash Buffer), the purified DNA is eluted by low-salt elution buffer or nuclease-free water.

# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Genomic DNA Clean-Up Kit (FAGDC)

### Description

The FavorPrep™ Genomic DNA Clean-Up Kit is designed for rapid genomic DNA clean up. It isolates ultrapure, large-sized DNA from enzymatic reactions or other impure preparations. This kit utilizes silica-based spin column technology for DNA binding which exhibits high DNA recovery rate. The ultrapure DNA is ready-to-use in varied applications and extracted only in three steps (binding, washing and elution).

### Features

- ★ **Quick/Easy to Use:** Fast extraction in only three steps.
- ★ **Safety:** No phenol/chloroform and ethanol precipitation steps.
- ★ **High Purity:** Effectively remove impure molecules.

### Specifications

**Sampling:** Up to 100 µl of genomic DNA  
(up to 60 µg of genomic DNA)

**Recovery:** 80-95%

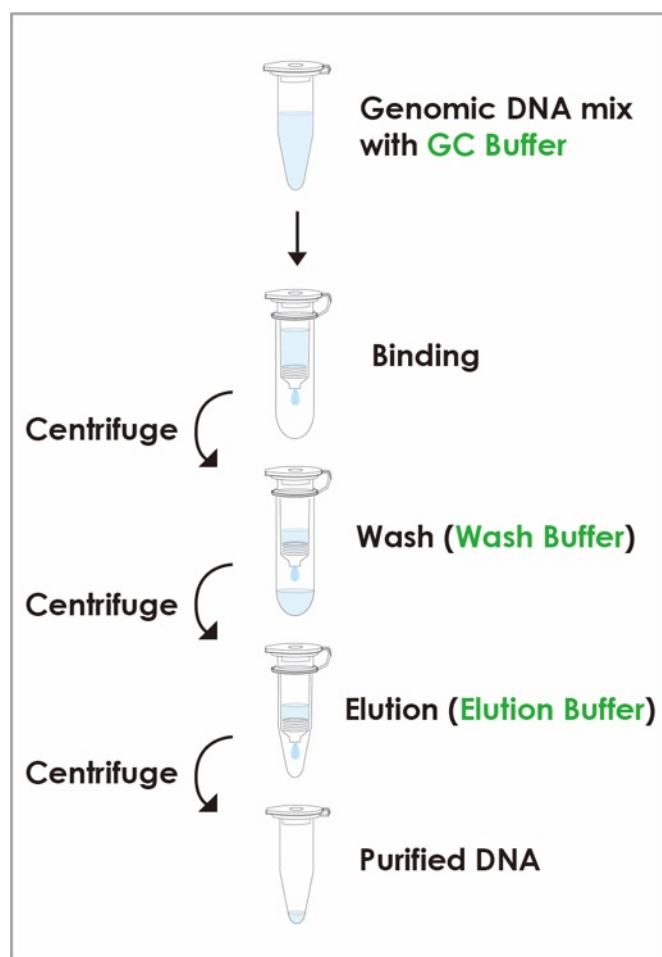
**Volume of Eluate:** 50~200 µl

**Binding Capacity:** Up to 60 µg/column

**Handling Time:** Within 15 minutes

### Applications

PCR; qPCR; DNA sequencing; microarray; enzymatic digestion; NGS.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAGDC 001 FAGDC 001-1	FavorPrep™ Genomic DNA Clean-Up Kit	50 preps 200 preps	GC Buffer Wash Buffer (Concentrate) Elution Buffer GC Columns Collection Tubes Elution Tubes

### Procedure

In the process, the genomic DNA mix with GC Buffer provides an optimal environment for DNA binding to glass fiber of the spin column. After washing step, the impurities (e.g., nucleotides, enzymes, salts, agarose, ethidium bromide) are completely removed. Finally, the pure DNA is eluted by a low-salt elution buffer or pure water.

# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Plant Genomic DNA Extraction Mini/Maxi Kit (FAPGK)

### Description

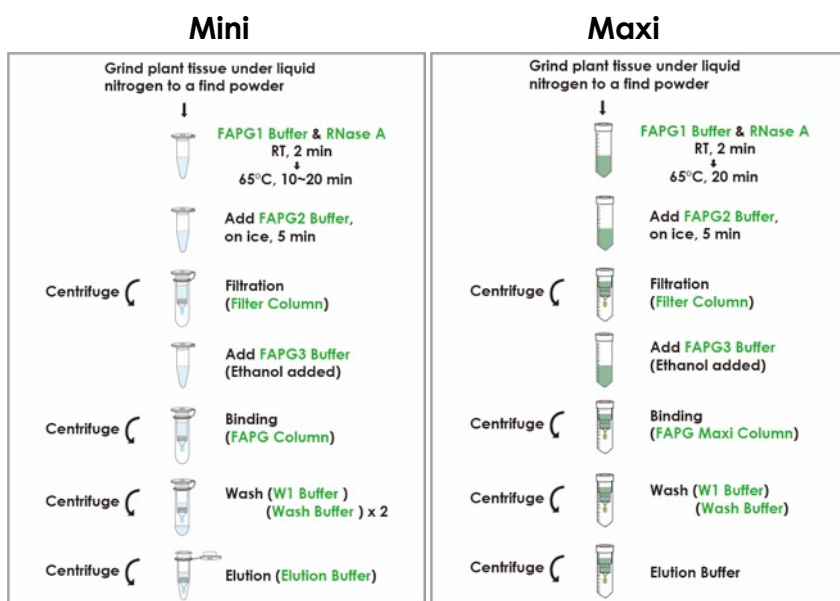
The FavorPrep™ Plant Genomic DNA Extraction Mini/Maxi Kit is an efficient and easy-to-use tool and specially designed for genomic DNA extraction from plant tissue or cultured plant cells. The procedure includes plant tissue lysis, optimized enzyme treatment to remove RNA from the sample mixture and filter columns removing unwanted particles. Silica-based FAPG Column and FAPG3 Buffer are specially designed for plant genomic DNA extraction that enables optimal performance. This kit provides an easy and efficient method to purify plant genomic DNA.

### Features

- ★ **High Yield/Purity:** Isolate high-quality DNA suitable for a variety of applications, including molecular biology, enzyme digestion, PCR, etc.
- ★ **Safe:** The kit effectively removes proteins and nuclease from plant cells. No harmful organic solvents in the procedure.
- ★ **Versatile:** Extract plant genomic DNA from various plant sources.

### Applications

PCR; qPCR; southern blotting; DNA sequencing; SNP genotyping.



### Specifications

Scale	Mini	Maxi
<b>Features</b>		
<b>Format/Principle</b>	Spin column (Silica matrix)	
<b>Sample Size</b>	<ul style="list-style-type: none"> <li>Wet weight ≤ 100 mg</li> <li>Dry weight ≤ 20 mg</li> </ul>	<ul style="list-style-type: none"> <li>Wet weight ≤ 1g</li> <li>Dry weight ≤ 100 mg</li> </ul>
<b>Column Capacity</b>	60 µg	500 µg
<b>Average of DNA Yield</b>	5~40 µg	50~300 µg
<b>Handing Time</b>	1 hour	
<b>Elution Volume</b>	40~100 µl	0.75~1.5 ml

### Procedure

In the process, plant tissue is treated with liquid nitrogen and ground into fine powder. The crushed plant tissue is lysed by FAPG1 (RNase A contained) and FAPG2 Buffer. The tissue debris in lysate are removed by provided filter columns. The genomic DNA in the lysate binds to the silica matrix of the spin column. After washing off the contaminants (W1 Buffer and Wash Buffer), the purified plant DNA is eluted by low-salt elution buffer or water.

### Ordering information

Cat. No.	Product Name	Size	Contents
FAPGK 001 FAPGK 001-1 FAPGK 001-2	FavorPrep™ Plant Genomic DNA Extraction Mini Kit	50 preps 100 preps 200 preps	FAPG1 Buffer FAPG2 Buffer FAPG3 Buffer (Concentrate) W1 Buffer (Concentrate) Wash Buffer (Concentrate) Elution Buffer RNase A Filter Columns FAPG Mini/Maxi Columns Collection Tubes
FAPGK 002	FavorPrep™ Plant Genomic DNA Extraction Maxi Kit	10 preps	





# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Tissue Genomic DNA Extraction Mini Kit (FATGK)

### Description

The FavorPrep™ Tissue Genomic DNA Extraction Mini Kit is designed for rapid extraction of pure, small-scale genomic DNA from several types of tissues, bacteria, fixed tissue, yeast, or dried blood spot. The purified DNA is ready-to-use in multiple applications, such as PCR, qPCR, cloning, DNA sequencing and library preparation in NGS.

### Features

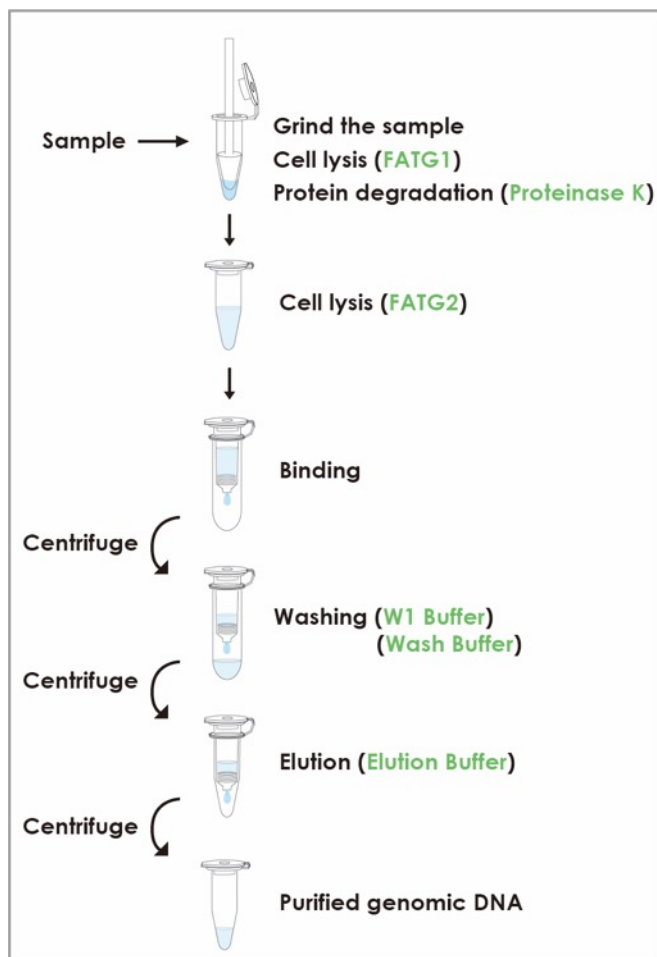
- ★**Time Saving:** Rapid extraction of genomic DNA from tissue samples within 1~2 hours (depending on the sample type).
- ★**Safety:** No caustic organic compound.
- ★**Versatile:** Extraction of genomic DNA from several types of tissue, such as formalin-fixed tissue, yeast or dried blood.
- ★**High Recovery:** Up to 25 mg of fresh/frozen tissue can be used; binding capacity is up to 60 µg of genomic DNA.

### Specifications

- Format/Principle:** Mini spin column (silica matrix)
- Operation Time:** 30~60 minutes
- Binding Capacity:** Up to 60 µg DNA/column
- Typical Yield:** 15~35 µg/prep
- Column Applicability:** Centrifugation and vacuum
- Minimum Elution Volume:** 50 µl
- Sample Size:** <25 mg animal tissue; 1.2 cm mouse tail; <1×10<sup>7</sup> cultured cells

### Applications

PCR; real-time PCR; southern blotting; medicolegal analysis; NGS.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FATGK 001	FavorPrep™	50 preps	FATG1 Buffer
FATGK 001-1	Tissue Genomic DNA	100 preps	FATG2 Buffer
FATGK 001-2	Extraction Mini Kit	300 preps	W1 Buffer (Concentrate)
			Wash Buffer (Concentrate)
			Proteinase K
			Elution Buffer
			FATG Mini Columns
			Collection Tubes
			Elution Tubes
			Micropestles

### Procedure

In the process, the method uses proteinase K and chaotropic salt-guanidine hydrochloride buffers (FATG1 Buffer and FATG2 Buffer) to lyse cells and degrade protein, then DNA is bound to silica-fiber matrix of the FATG Mini Column. After washing step (W1 Buffer and Wash Buffer), the impurities, such as salts, metabolites, nucleases and other body-fluid components are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or pure water.



# GENOMIC DNA EXTRACTION SERIES

## FavorPrep™ Tissue Genomic DNA Extraction MicroElute Kit (FATGM)

### Description

The FavorPrep™ Tissue Genomic DNA Extraction MicroElute Kit is designed for rapid extraction of pure, small-scale genomic DNA from various sample types, such as animal tissues, bacteria, fixed tissue, yeast, or dried blood spot. The minimum elution volume benefits to the concentrate DNA from small amount of samples. The purified DNA is ready-to-use in multiple applications, such as PCR, qPCR, cloning, DNA sequencing and library preparation in NGS.

### Features

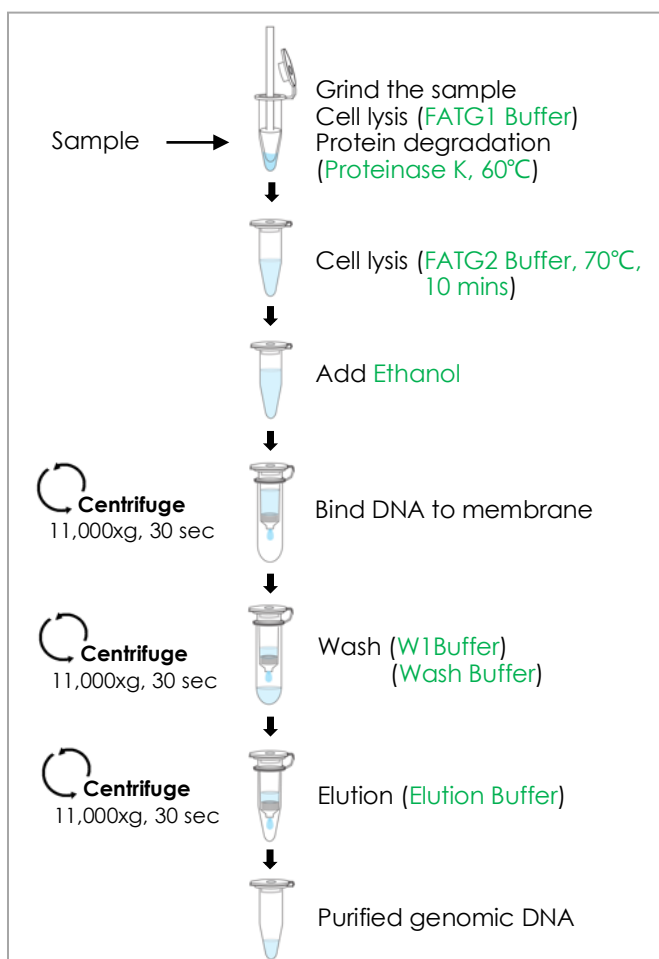
- ★**Time Saving:** Rapid extraction of genomic DNA from tissue samples, within 1~2 hours (depending on the sample type).
- ★**Yield Concentrated DNA:** Minimum elute volume in 10 µl.
- ★**Safety:** No caustic organic compound.
- ★**Versatile:** Extraction of genomic DNA from various types of samples, including animal tissues, fixed tissues, yeast or dried blood. Up to 10 mg of fresh/frozen tissues per reaction.

### Specifications

- Format/Principle:** Mini spin column (silica matrix)
- Operation Time:** <60 minutes
- Binding Capacity:** Up to 10 µg/column
- Column Applicability:** Centrifugation
- Sample Size:** Up to 10 mg of animal tissues
- Minimum Elution Volume:** 10 µl

### Applications

PCR; real-time PCR; southern blotting; medicolegal analysis; NGS.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FATGM 001B FATGM 001-1B	FavorPrep™ Tissue Genomic DNA Extraction MicroElute Kit	50 preps 100 preps	FATG1 Buffer FATG2 Buffer W1 Buffer (Concentrate) Wash Buffer (Concentrate) Elution Buffer Proteinase K TGM Columns Collection Tubes Elution Tubes Micropestles

### Procedure

The method uses proteinase K and chaotropic salt-guanidine hydrochloride buffers (FATG1 Buffer and FATG2 Buffer) to lyse cells and degrade protein, then DNA is bound to silica-fiber matrix of the TGM Micro Column. After washing step (W1 Buffer and Wash buffer), the impurities, such as salts, metabolites, nucleases and other body-fluid components are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or pure water.

# DNA FRAGMENT EXTRACTION SERIES

## FavorPrep™ GEL Purification Mini Kit (FAGPK)

### Description

The FavorPrep™ GEL Purification Mini Kit is designed to rapidly recover DNA fragments from TAE and TBE agarose gels. This kit includes silica-based spin column for DNA binding and has high recovery rate of agarose gels. The purified DNA fragments are ready-to-use for DNA sequencing, restriction enzyme digestion, DNA labeling and ligation reactions.

### Features

- ★ **Quick:** Rapid extraction of DNA fragments from agarose gels.
- ★ **High Quality:** Recover high quality DNA; ready-to-use for common downstream applications.
- ★ **Safe:** No caustic organic compounds.

### Specifications

**Format/Principle:** Spin column (silica matrix)

**DNA Binding Capacity:** 20 µg/column

**Sample Size:** Up to 200 mg of agarose gel

**DNA Size:** 65 bp~10 kbp

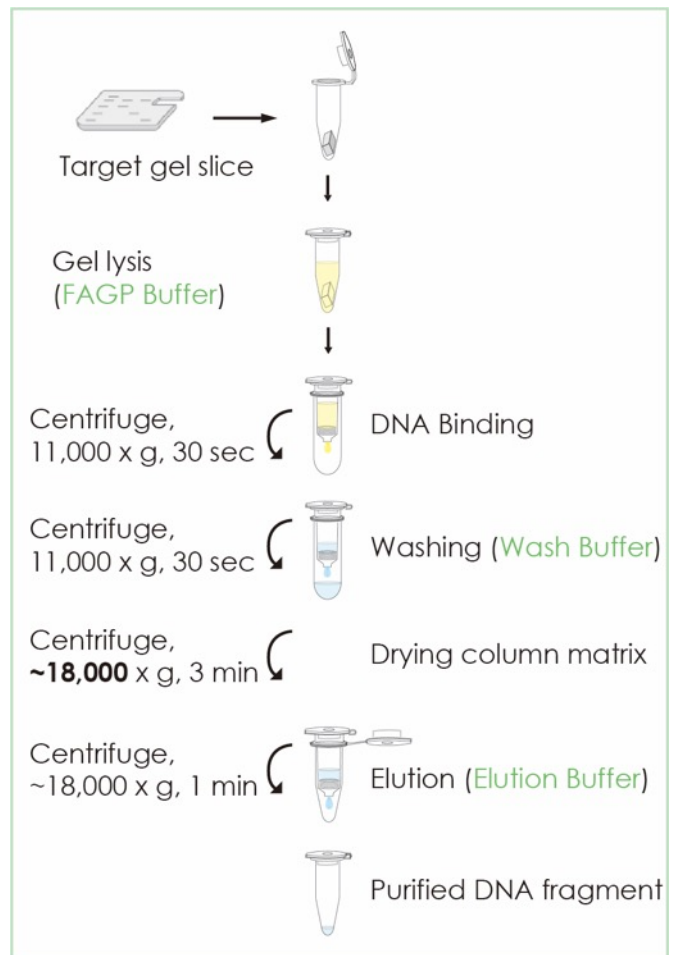
**Operation Time:** <25 minutes

**Recovery:** 70-85% for gel extraction

**Elution Volume:** ≥40 µl

### Applications

PCR; DNA sequencing; restriction enzyme digestion; DNA labeling; ligation and transformation.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAGPK 001	FavorPrep™	50 preps	FAGP Buffer
FAGPK 001-1	GEL Purification	200 preps	Wash Buffer (Concentrate)
FAGPK 001-2	Mini Kit	300 preps	Elution Buffer
			FAGP Columns
			Collection Tubes
			Elution Tubes

### Procedure

The method uses a pH indicator contained chaotropic salt buffer (FAGP) to dissolve the agarose gel. The DNA fragments in FAGP Buffer are bound to silica-fiber matrix of the spin column. After washing steps (Wash Buffer), the impurities (e.g., primers, nucleotides, salts, agarose, ethidium bromide) are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or water.

# DNA FRAGMENT EXTRACTION SERIES

## FavorPrep™ MicroElute GEL Extraction Kit (FAMGK)

### Description

The FavorPrep™ MicroElute GEL Extraction Kit is designed to rapidly recover DNA fragments from interested TAE and TBE agarose gels. This kit includes a special MicroElute silica-based spin column that allows concentrating DNA in a small elution volume. The purified DNA fragments are ready-to-use for DNA sequencing, restriction enzyme digestion, DNA labeling and ligation reactions.

### Features

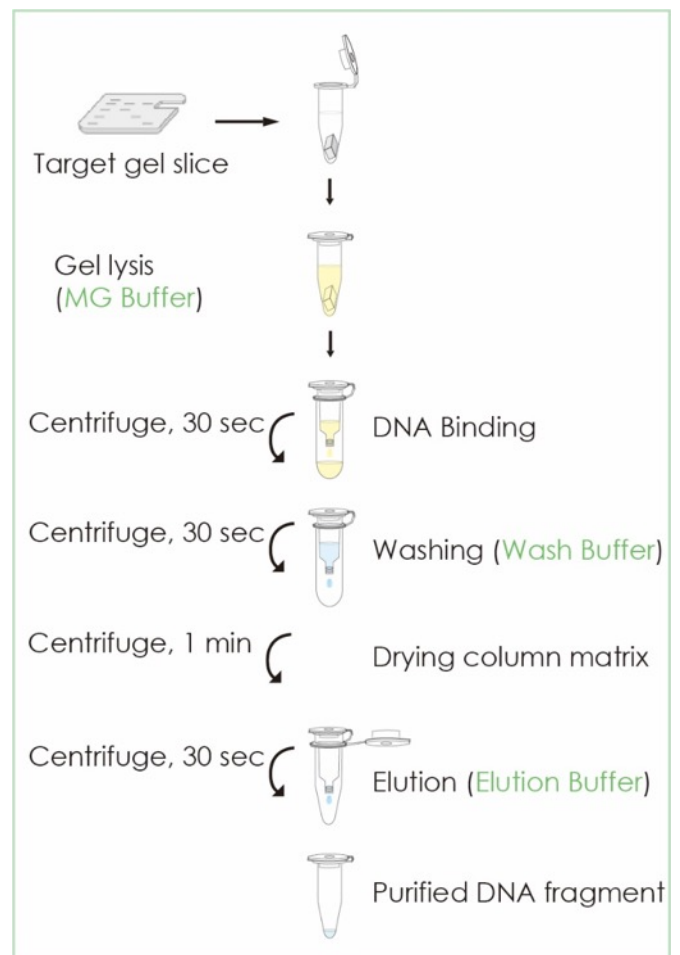
- ★ **Yield Concentrated DNA:** Minimum elution volume in 10 µl.
- ★ **Quick:** Rapid extraction of DNA fragments from agarose gel.
- ★ **High Quality:** Recover high quality DNA; ready-to-use for common downstream applications.
- ★ **Safe:** Phenol/chloroform-free.

### Specifications

- Format/Principle:** Spin column (silica matrix)
- DNA Binding Capacity:** 5 µg/column
- Sample Size:** Up to 200 mg of agarose gel
- DNA Size:** 65 bp~10 kbp
- Operation Time:** 20 minutes
- Recovery:** 80-90% for gel extraction
- Minimum Elution Volume:** 10 µl

### Applications

PCR; DNA sequencing; restriction enzyme digestion; DNA labeling; ligation and transformation.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAMGK 001B FAMGK 001-1B	FavorPrep™ MicroElute GEL Extraction Kit	50 preps 200 preps	MG Buffer Wash Buffer (Concentrate) Elution Buffer MG Columns Collection Tubes

### Procedure

The method uses a pH indicator contained chaotropic salt buffer (MG) to dissolve the agarose gel. The DNA fragments in MG Buffer are bound to silica-fiber matrix of the MG Column. After the washing steps (Wash Buffer), the impurities (e.g., primers, nucleotides, salts, agarose, ethidium bromide) are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or water.

# DNA FRAGMENT EXTRACTION SERIES

## FavorPrep™ PCR Clean-Up Mini Kit (FAPCK)

### Description

The FavorPrep™ PCR Clean-Up Mini Kit is designed for cleaning up DNA fragments from PCR product and other enzymatic reactions. With silica-based spin columns and special size-selection buffers, the range of DNA size is between 65 bp~10 kbp; the 20~40 oligonucleotide fragments will be removed. The purified DNA is ready-to-use for various applications with three easy steps (binding, washing and elution).

### Features

- ★ **High Recovery:** Up to 95% recovery rate.
- ★ **Quick:** Rapid purification of DNA fragments; three steps only.
- ★ **High Quality:** Recover high quality DNA; ready-to-use for common downstream applications.
- ★ **Safe:** Phenol/chloroform-free.

### Specifications

**Format/Principle:** Spin column (Silica matrix)

**DNA Binding Capacity:** 20 µg/column

**Sample Size:** Up to 100 µl of reaction solution

**DNA Size:** 65 bp~10 kbp

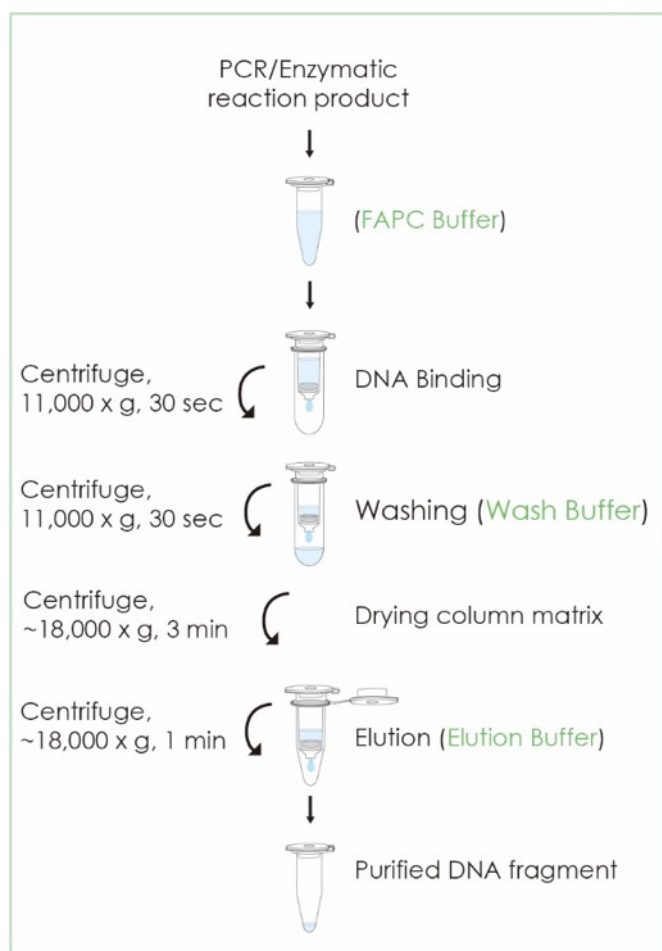
**Recovery:** 85-95% for PCR clean up

**Operation Time:** ≤15 minutes

**Elution Volume:** ≥20 µl

### Applications

PCR; fluorescent or radioactive sequencing; restriction digestion; DNA labeling; ligation and transformation.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAPCK 001	FavorPrep™ PCR Clean-Up Mini Kit	50 preps	FAPC Buffer
FAPCK 001-1		200 preps	Wash Buffer
FAPCK 001-2		300 preps	(Concentrate)
			Elution Buffer
			FAPC Columns
			Collection Tubes
			Elution Tubes

### Procedure

The method uses a pH indicator contained chaotropic salt buffer (FAPC) to help DNA binding on silica-fiber matrix of the FAPC Column. After washing steps (Wash Buffer), the impurities (e.g., primers, nucleotides, salts, enzyme) are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or water.



# DNA FRAGMENT EXTRACTION SERIES

## FavorPrep™ MicroElute PCR Clean Up Kit (FAMPK)

### Description

The FavorPrep™ MicroElute PCR Clean Up Kit is designed for cleaning up DNA fragments from PCR product and other enzymatic reactions. A special MicroElute column allows concentrating DNA with small elution volume. With silica-based spin columns and special size-selection buffers, the range of DNA size is between 65 bp~10 kbp; the 20~40 oligonucleotide fragments will be removed. The purified DNA is ready-to-use in various applications with three easy steps (binding, washing and elution).

### Features

- ★ **High Recovery:** Up to 90% recovery rate.
- ★ **Quick:** Rapid purification of DNA fragments; three steps only.
- ★ **High Quality:** Recover high quality DNA; ready-to-use for common downstream applications.
- ★ **Safe:** Phenol/chloroform-free.

### Specifications

**Format/Principle:** Spin column (silica matrix)

**DNA Binding Capacity:** 5 µg/column

**Sample Size:** Up to 100 µl of reaction solution

**DNA Size:** 65 bp~10 kbp

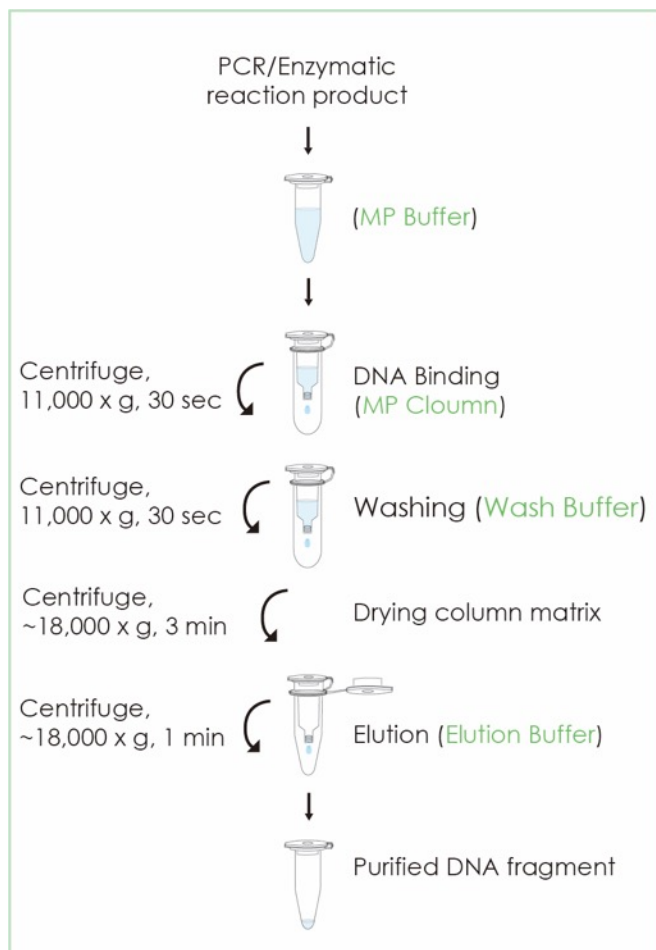
**Recovery:** 80-90% for PCR clean up

**Operation Time:** 10 minutes

**Minimum Elution Volume:** 10 µl

### Applications

PCR; fluorescent or radioactive sequencing; restriction digestion; DNA labeling; ligation and transformation.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAMPK 001B FAMPK 001-1B	FavorPrep™ MicroElute PCR Clean-Up Kit	50 preps 100 preps	MP Buffer Wash Buffer (Concentrate) Elution Buffer MP Columns Collection Tubes

### Procedure

The method uses a pH indicator contained chaotropic salt buffer (MP) to help DNA binding on silica-fiber matrix (MP Column). After washing steps (Wash buffer), the impurities (e.g., primers, nucleotides, salts, enzyme) are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or water.

# DNA FRAGMENT EXTRACTION SERIES

## FavorPrep™ GEL/PCR Purification Mini Kit (FAGCK)

### Description

The FavorPrep™ GEL/PCR Purification Mini Kit is designed to recover and concentrate DNA fragments from agarose gels, PCR or other enzymatic reactions. The unique multi-purpose kit effectively reduces cost in molecular biological laboratory. The purified DNA fragments are ready-to-use for DNA sequencing, restriction enzyme digestion, DNA labeling and ligation reactions.

### Features

- ★ **Versatile:** Purify DNA from agarose gels, PCR or other enzymatic reactions. The recovery-fragment size is between 65 bp~10 kbp.
- ★ **Safe:** No phenol/chloroform and other caustic organic compounds.
- ★ **Time Saving:** 10 minutes for PCR purification; 20 minutes for gel extraction.

### Specification

**Format/Principle:** Spin column (silica matrix)

**DNA Binding Capacity:** 20 µg/column

**Sample Size:** Up to 300 mg of agarose gel; Up to 100 µl of PCR or enzymatic solution.

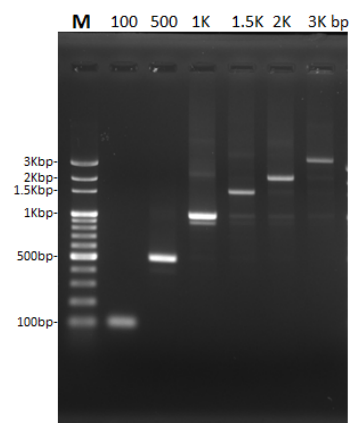
**DNA Size:** 65 bp~10 kbp

**Recovery:** 70~85% for gel extraction; 75~95% for PCR clean up

**Minimum Elution Volume:** 20 µl

### Applications

PCR; DNA sequencing; restriction enzyme digestion; DNA labeling; ligation and transformation.



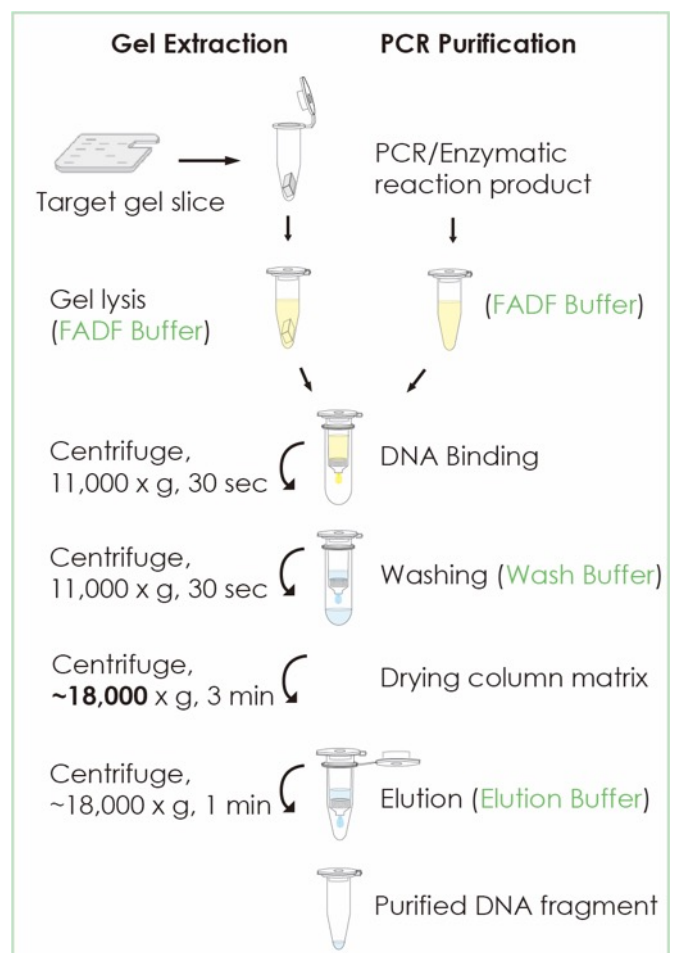
#### Effectiveness of FavorPrep™ GEL/PCR Purification Mini Kit (FAGCK).

Different size of DNA fragments were cut from DNA ladder and applied to FAGCK. The data had indicated that the DNA fragments from 100 bp to 3 kbp were successfully extracted by FAGCK.

Abbreviation:  
M: DNA ladder (Maker)

### Ordering Information

Cat. No.	Product Name	Size	Contents
FAGCK 001 FAGCK 001-1	FavorPrep™ GEL/PCR Purification Mini Kit	100 preps 300 preps	FADF Buffer Wash Buffer (Concentrate) Elution Buffer FADF Columns Collection Tubes



### Procedure

The method uses a pH indicator contained chaotropic salt buffer (FADF) to dissolve the agarose gel and provides suitable environment for DNA binding. The DNA fragments in FADF Buffer are bound to silica-fiber matrix of FADF column. After the washing steps (Wash buffer), the impurities (e.g., primers, nucleotides, salts, agarose, ethidium bromide) are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or pure water.

# DNA FRAGMENT EXTRACTION SERIES

## FavorPrep™ MicroElute GEL/PCR Purification Kit (FAEPK)

### Description

The FavorPrep™ MicroElute GEL/PCR Purification Kit allows isolating and concentrating DNA fragments from agarose gels, PCR or other enzymatic reactions. This kit efficiently eliminates impurities and salt from the sample mixture. The purified DNA fragments are ready-to-use for downstream applications, such as DNA sequencing, restriction enzyme digestion, DNA labeling and ligation reactions, and the elution volume can be reduced to 10 µl to obtain high-concentration DNA.

### Features

- ★ **Yield Concentrated DNA:** Minimum elution volume in 10 µl.
- ★ **Quick:** Rapid purification of DNA fragments from agarose gels or enzymatic reactions within 20 mins.
- ★ **High Quality:** High-purity DNA is ready-to-use in common downstream applications without phenol/chloroform.

### Specification

**Format/Principle:** Spin column (silica matrix)

**DNA Binding Capacity of Spin Column:** 5 µg/column

**Sample Size:** Up to 200 mg of agarose gel; Up to 100 µl of PCR product or enzymatic reaction.

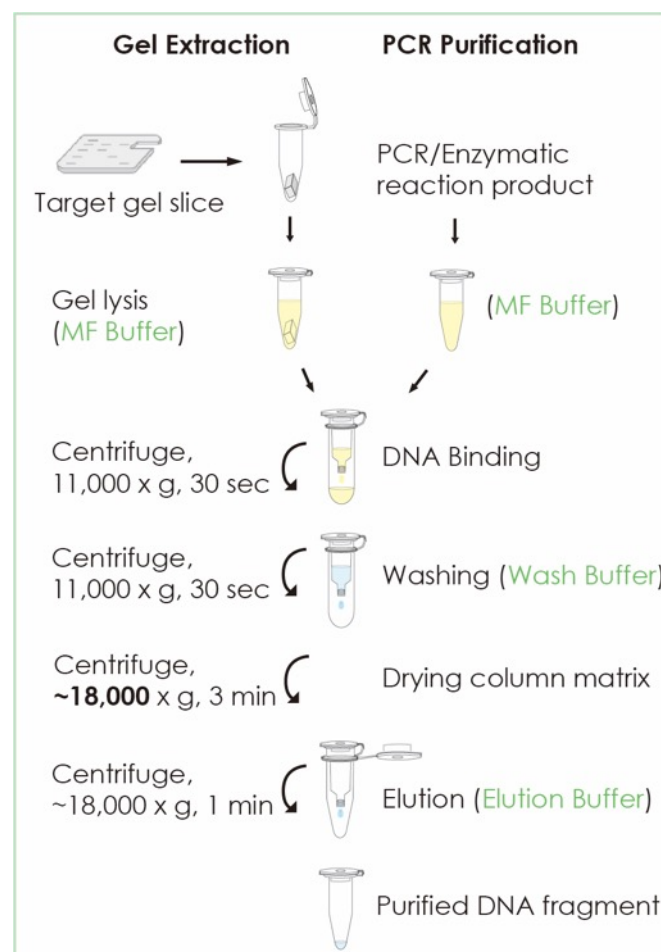
**DNA Size:** 65 bp~10 kbp

**Recovery:** 70%~85% for gel extraction; 85%~95% for PCR clean-up

**Minimum Elution Volume:** 10 µl

### Applications

PCR; fluorescent or radioactive sequencing; restriction digestion; DNA labeling; ligation and transformation.



### Procedure

The method uses a pH indicator contained chaotropic salt buffer (MF) to dissolve the agarose gel and/or provide suitable environment for DNA binding. The DNA fragments in MF Buffer are bound to silica-fiber matrix of MF column. After the washing steps (Wash Buffer), the impurities (e.g., primers, nucleotides, salts, agarose, ethidium bromide) are completely removed. Finally, the purified DNA is eluted by small volume (10 µl) of low-salt elution buffer or pure water.

### Ordering Information

Cat. No.	Product Name	Size	Contents
FAEPK 001B FAEPK 001-1B	FavorPrep™ MicroElute GEL/PCR Purification Kit	50 preps 100 preps	MF Buffer Wash Buffer (concentrate) Elution Buffer MF Columns Collection Tubes

# TOTAL RNA EXTRACTION SERIES

## FavorPrep™ Soil/Stool RNA Extraction MicroElute Kit (FAFRK-Micro)

### Description

The FavorPrep™ Soil/Stool RNA Extraction MicroElute Kit is designed for isolation of total RNA from soil and stool samples. Lysis buffer is optimally designed with unique Glass-Beads Tube to lyse samples effectively. Besides, the inhibitors and contaminants in solid and stool samples can be removed. The three different types of spin columns included in this kit allow removing genomic DNA from sample lysates, isolating and concentrating RNA. The entire procedure is not required the phenol/chloroform extraction and the purified RNA is ready-to-use for downstream applications.



### Features

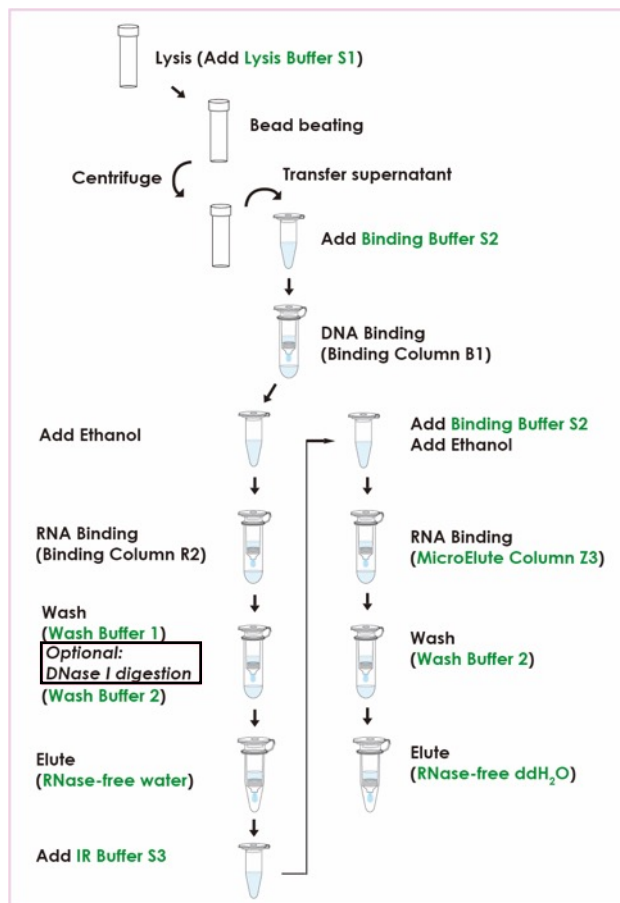
- ★ **Time Saving:** Rapid isolation of ready-to-use RNA.
- ★ **Safe:** No phenol/chloroform.
- ★ **High Purity:** Eliminate humic acid, polysaccharides and enzyme inhibitors from soil or stool samples.
- ★ **Convenience:** High-quality RNA; ready-to-use for downstream applications.
- ★ **Easy-to-use:** Fast extraction by beads beating without sample grinding.

### Specifications

- Format/Principle:** Spin column (silica membrane)
- Sample Size:** Up to 250 mg soil or stool
- Minimum Elution Volume:** 10 µl

### Applications

RT-PCR; infectious disease research; NGS; microarray



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAFRK 000_Micro FAFRK 001_Micro	FavorPrep™ Soil/Stool RNA Extraction MicroElute Kit	100 preps	Glass-Beads Tubes Lysis Buffer S1 Binding Buffer S2 IR Buffer S3 Wash Buffer 1 (Concentrate) Wash Buffer 2 (Concentrate) RNase-free ddH <sub>2</sub> O Binding Column B1 Binding Column R2 MicroElute Column Z3 Collection Tubes Elution Tubes

### Procedure

The method uses Glass-Beads Tubes and unique lysis buffers to homogenize and lyse soil or stool samples. Binding Column B1 and optional DNase I digestion help eliminating residual DNA. The RNA allows maximally linking to Binding Column R1 and being concentrated by Binding Column Z3. After contaminants being washed away by ethanol containing wash buffer. The purified RNA is eluted by minimum elution volume (10 µl) of RNase-free ddH<sub>2</sub>O.



# TOTAL RNA EXTRACTION SERIES

## FavorPrep™ Total RNA Plus Mini Kit (FATRK-P)

### Description

FavorPrep™ Total RNA Plus Mini Kit is designed for purification of total RNA from a wide range of cell lines and tissues through extraction with efficient gDNA removal step. This kit eliminates gDNA by using unique gDNA Removal Columns without the enzymatic DNase step. The high quality of RNA is suitable for RT-qPCR and sensitive applications.

### Features

- ★**Efficient:** Remove genomic DNA by using unique gDNA Removal Column; DNase I digestion is not required.
- ★**High quality:** Eliminate DNA contamination; RNA is ready-to-use for various downstream and sensitive applications.
- ★**Safe:** No phenol/chloroform and ethanol precipitation.

### Specifications

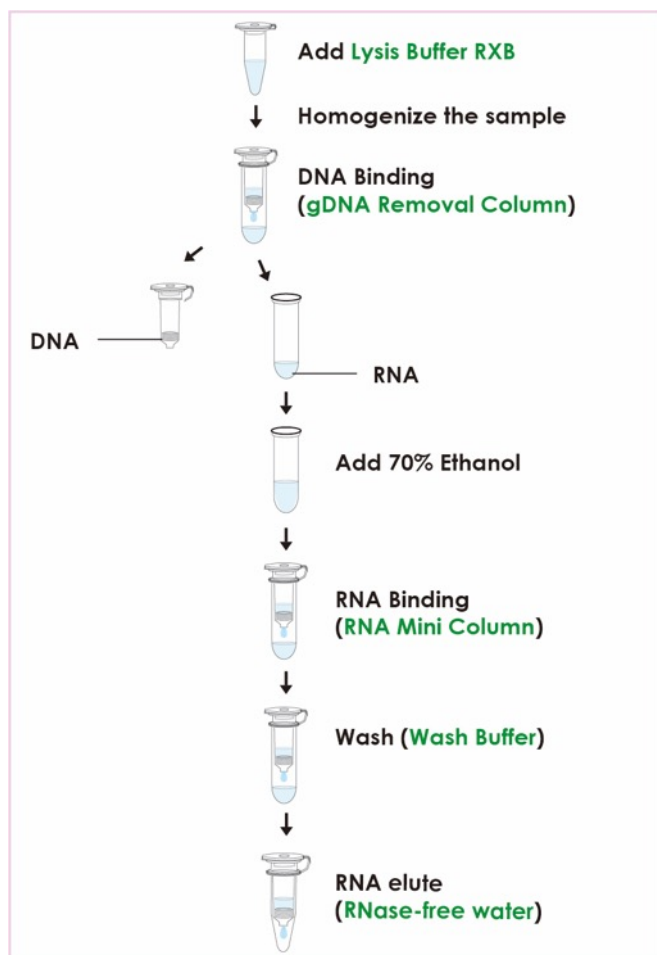
**Format/Principle:** Spin column (silica membrane)

**Sample Size:** Up to  $1 \times 10^7$  animal cells; Up to 30 mg tissue specimens.

**Elution Volume:** 30–50  $\mu$ l

### Applications

RT-qPCR; Northern blotting hybridizations; cDNA synthesis; mRNA selection; *in vitro* translation; microarray analysis.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FATRK-P 050	Favorprep™	50 preps	Lysis Buffer RXB Wash Buffer (Concentrate) RNase-Free Water gDNA Removal Columns RNA Mini Columns Collection Tubes Elution Tubes
FATRK-P 100	Total RNA Plus Mini Kit	100 preps	

### Procedure

The method uses special RXB lysis buffer that contains detergent and chaotropic salt to lysis cell and inactivate RNase. The residual DNA in the lysate has been removed by the gDNA Removal Column. The RNA in chaotropic salt with appropriate ethanol is bound to the silica fiber matrix of RNA Mini Column. After washing off the impurities, the purified RNA is eluted by RNase-free water.

# TOTAL RNA EXTRACTION SERIES

## FavorPrep™ Tissue Total RNA Mini/Maxi Kit (FATRK)

### Description

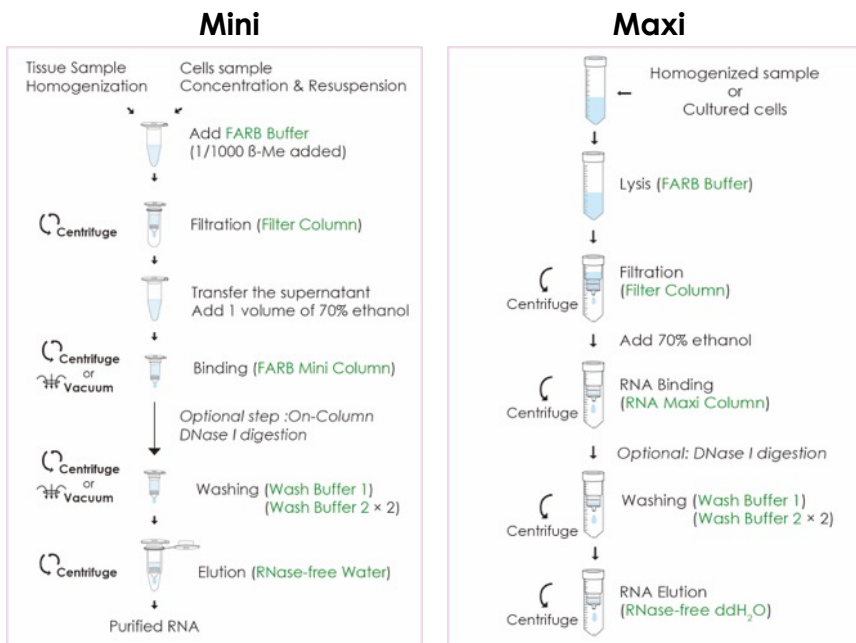
FavorPrep™ Tissue Total RNA Mini and Maxi Kit is designed for purification of total RNA from animal tissues, cultured animal cells, and bacterial cells by using the chaotropic salt-lysis method without the use of hazardous solvents. The purified RNA is ready-to-use in RT-PCR, RT-qPCR, Northern blotting and cDNA construction.

### Features

- ★**High Purity:** OD260/280: >1.9
- ★**Safe to Use:** Eliminate the use of phenol, chloroform, ethidium bromide, and cesium chloride; minimize the exposure to hazardous materials.
- ★**High Speed:** 30~60 minutes in whole procedure.

### Applications

RT-PCR; quantitative real-time PCR; Northern blotting hybridizations; cDNA synthesis; mRNA selection; *in vitro* translation; microarray analysis.



### Specifications

Features	Scale	Midi	Maxi
Format/Principle	Spin column (silica matrix)		
Length of Recovered RNA	> 200 bp		
Recommend Sample Size		<ul style="list-style-type: none"> <li>• Animal tissue: 10 mg</li> <li>• Animal cells: 1 × 10<sup>6</sup> cells</li> <li>• Bacterial cells: 1 × 10<sup>9</sup> cells</li> <li>• Yeast cells: 1 × 10<sup>7</sup> cells</li> </ul>	<ul style="list-style-type: none"> <li>• Animal tissue: ≤650 mg</li> <li>• Animal cells: ≤1.5 × 10<sup>8</sup> cells</li> <li>• Bacterial cells: ≤3 × 10<sup>10</sup> cells</li> <li>• Yeast cells: ≤1 × 10<sup>9</sup> cells</li> </ul>
Column Capacity		100 µg	2 g
Column Applicability	Centrifugation and vacuum		
Operation Time		30~60 minutes	60 minutes
Elution Volume		30 µl	500 µl

### Procedure

The extraction method uses silica-based chaotropic salt technology. The unique FARB Buffer lyses samples effectively; the lysate passes through the Filter Columns to remove debris. The RNA in chaotropic salt with appropriate ethanol is bound to the silica fiber matrix of FARB Mini Columns or RNA Maxi Columns. After washing off the impurities (Wash Buffer 1 & 2), the purified RNA is eluted by RNase-free water.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FATRK 001 FATRK 001-1 FATRK 001-2	FavorPrep™ Tissue Total RNA Mini Kit	50 preps 100 preps 300 preps	FARB Buffer Wash Buffer 1 Wash Buffer 2 (Concentrate) RNase-Free Water Filter Columns FARB Mini Columns Collection Tubes Elution Tubes Micropestles
FATRK 003	FavorPrep™ Tissue Total RNA Maxi Kit	10 preps	FARB Buffer Wash Buffer 1 Wash Buffer 2 (Concentrate) RNase-Free ddH <sub>2</sub> O Filter Columns RNA Maxi Columns 50 ml Centrifuge Tubes



# TOTAL RNA EXTRACTION SERIES

## FavorPrep™ Tissue Total RNA MicroElute Kit (FATRM)

### Description

The FavorPrep™ Tissue Total RNA MicroElute Kit is designed for the rapid extraction of pure and small-scale RNA from various types of tissues, bacteria, fixed tissues or yeast. The minimum elution volume promotes concentrating RNA from small amount sample. The purified RNA is ready-to-use in RT-PCR, northern blotting, primer extension and cDNA construction.

### Features

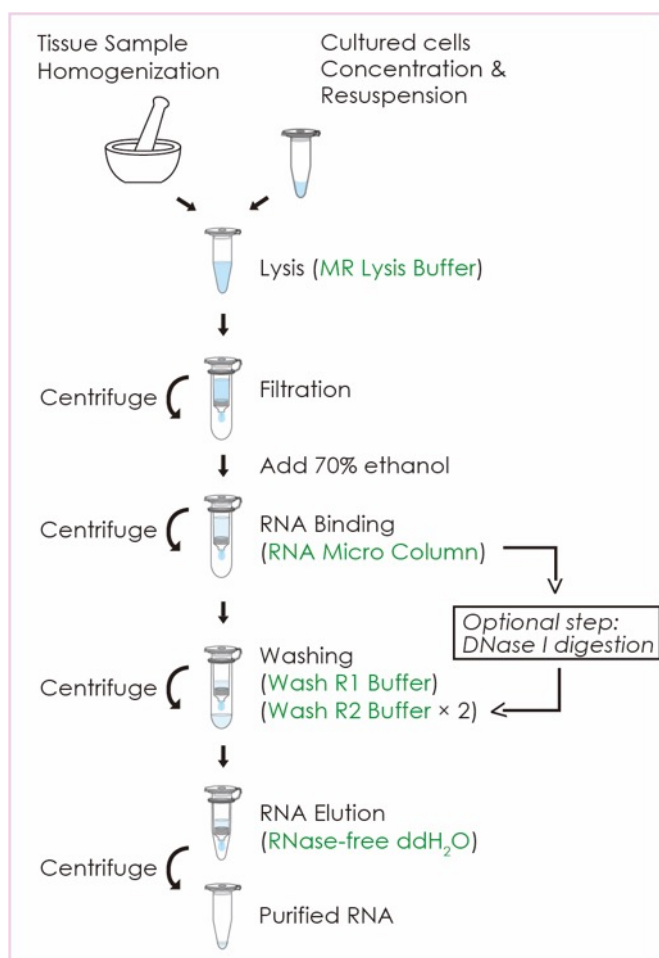
- ★ **Yield Concentrated RNA:** Minimum elution volume in 12 µl.
- ★ **Easy to Use:** Rapid isolation without the use of caustic organic compounds.
- ★ **Time Saving:** Rapid isolation of RNA from tissue sample; operation time is less than 1 hour.
- ★ **High quality:** Purify high-quality RNA which is ready-to-use in downstream applications.

### Specifications

- Format/Principle:** Micro spin column (silica matrix)
- Operation Time:** 30~60 minutes
- Binding Capacity:** Up to 35 µg total RNA per column.
- Column Applicability:** Centrifugation and vacuum.
- Sample Size:** Up to 5×10<sup>6</sup> animal cells; up to 15 mg animal tissue.
- Elution Volume:** 12~20 µl

### Applications

RT-qPCR; Northern blotting hybridization; cDNA synthesis; mRNA selection; *in vitro* translation; microarray analysis.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FATRM 001B FATRM 001-1B	FavorPrep™ Tissue Total RNA MicroElute Kit	50 preps 100 preps	MR Lysis Buffer Wash R1 Buffer (Concentrate) Wash R2 Buffer (Concentrate) RNase-Free ddH <sub>2</sub> O Filter Columns RNA Micro Columns Collection Tubes Elution Tubes

### Procedure

The method uses special MR lysis buffer that contains detergent and chaotropic salt to lysis cell and inactivate RNase. The residual debris in the lysate has been removed through the Filter Column. The RNA in chaotropic salt is bound to the silica fiber matrix of RNA Micro Column. After washing off the impurities (Wash R1 & R2 Buffer), the purified RNA is eluted by RNase-free ddH<sub>2</sub>O.

# TOTAL RNA EXTRACTION SERIES

## FavorPrep™ Plant Total RNA Mini/Maxi Kit (FAPRK)

### Description

The FavorPrep™ Plant Total RNA Mini/Maxi Kit is designed for purification of total RNA from plant tissues, plant cells and filamentous fungi. This kit uses the modified salt precipitation procedure and RNase inhibitors to improve extraction efficiency. This kit is quick, efficient, and the RNA purity is available for multiple downstream applications, including RT-PCR, Northern blotting, primer extension and cDNA library construction.

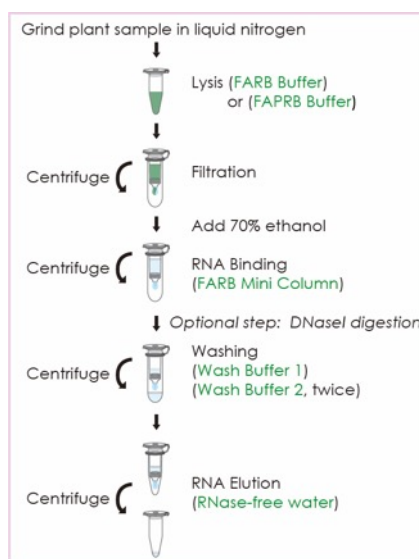
### Features

- ★ **High Purity:** OD 260/280: >1.9
- ★ **High Speed:** 30~60 minutes
- ★ **Safe to Use:** Eliminate the use of phenol, chloroform, ethidium bromide, and cesium chloride; minimize the exposure to hazardous materials.

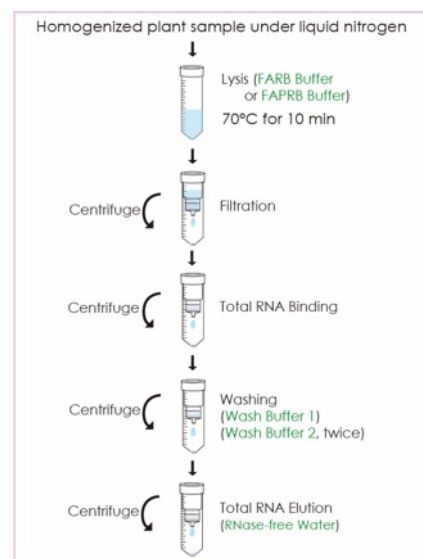
### Applications

Real-time RT-PCR; Northern blotting hybridization; primer extension; cDNA synthesis; mRNA selection; *in vitro* translation; micro-array.

### Mini



### Maxi



### Procedure

In the process, sample is destructed by grinding in liquid nitrogen and filtrated by the Filter Column to remove cell debris. In the chaotropic salt-contained lysis buffer (FARB or FAPRB), the total RNA is bound to silica fiber matrix of the spin column. The optional DNase treatments then remove DNA residues. After washing off impurities by the ethanol contained wash buffer (Wash buffer 1 & 2), the purified RNA is eluted by RNase-free water.

### Specifications

Scale	Mini	Maxi
<b>Features</b>		
<b>Format/Principle</b>	Spin column (silica matrix)	
<b>Sample Size</b>	<ul style="list-style-type: none"> <li>• Up to 100 mg plant tissue</li> <li>• Up to <math>1 \times 10^7</math> plant cells</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 1 g plant tissue</li> <li>• <math>0.5 \sim 1 \times 10^8</math> plant cells</li> </ul>
<b>Column Capacity</b>	100 $\mu$ g	1 g
<b>Expected Yield</b>	5~30 $\mu$ g of total RNA from 100 mg of tender leaves	50~300 $\mu$ g of total RNA from 1 g of tender leaves
<b>Operation Time</b>	<60 minutes	45~60 minutes
<b>Elution Volume</b>	30 $\mu$ l	500 $\mu$ l



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAPRK 001 FAPRK 001-1 FAPRK 001-2	FavorPrep™ Plant Total RNA Mini Kit	50 preps 100 preps 300 preps	FARB Buffer FAPRB Buffer Wash Buffer 1 Wash Buffer 2 (Concentrated) RNase-Free Water
FAPRK 002	FavorPrep™ Plant Total RNA Maxi Kit	10 preps	Filter Columns FARB Mini/Maxi Columns Collection Tubes Elution Tubes





# TOTAL RNA EXTRACTION SERIES

## FavorPrep™ After Tri-Reagent RNA Clean-Up Kit (FAATR)

### Description

The FavorPrep™ After Tri-Reagent RNA Clean-Up Kit is designed for fast cleaning up RNA which was isolated by other methods, such as guanidine isothiocyanate/phenol/chloroform extraction or lithium chloride/phenol/chloroform extraction. It is also suitable for fast cleaning up RNA from enzymatic reaction mixture, such as RNA labeling or DNase I digestion. In the purification procedure, the efficient reagents combining with the convenient spin-column system efficiently remove impurities. The phenol-chloroform is not required in the whole process; the extraction can be finished within 10 minutes. After using this purification kit, the purified RNA is ready-to-use for RT-PCR and other downstream applications.



### Features

- ★ **Quick:** Rapid clean-up of RNA from sample in less than 10 minutes.
- ★ **High Quality:** Obtain ultrapure RNA for sensitive downstream applications.
- ★ **Easy to Use:** Execute RNA clean-up directly after the organic extraction methods; isopropanol precipitation is not required.

### Specifications

**Format/Principle:** Spin column (silica matrix)

**Sample Size:** Up to 100 µl of RNA sample or enzymatic reaction mixture.

**High Purity:** OD260/280 1.9~2.1

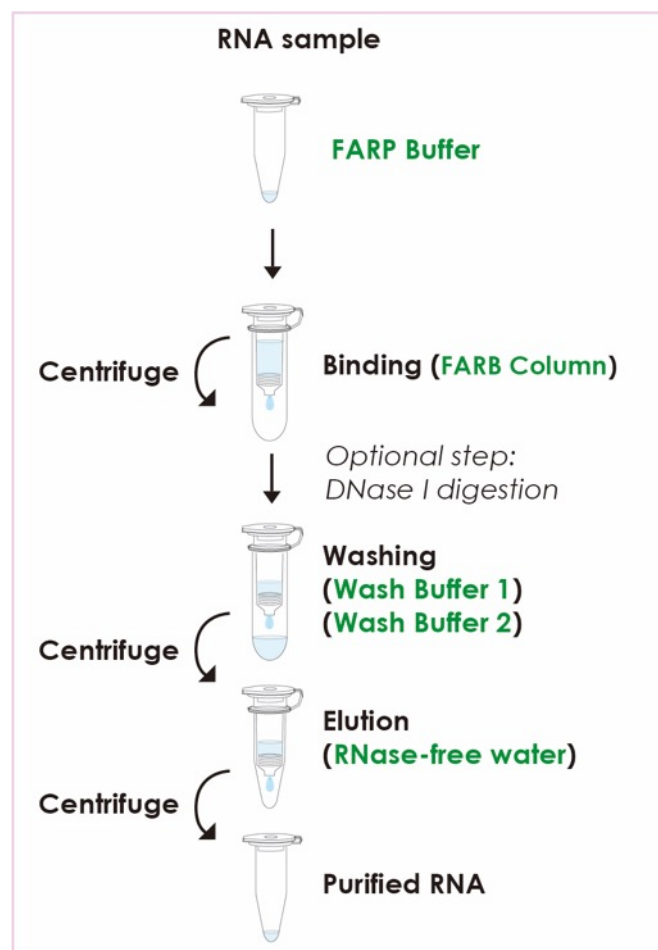
**Binding Capacity:** Up to 100 µg

**Operation Time:** <10 minutes

**Expected Recovery:** 85~95%

### Applications

RT-qPCR; Northern blotting hybridization; primer extension; cDNA synthesis; *in vitro* translation; microarray.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAATR 001 FAATR 001-1	FavorPrep™ After Tri-Reagent RNA Clean-Up Kit	50 preps 200 preps	FARP Buffer Wash Buffer 1 Wash Buffer 2 (Concentrate) RNase-Free Water FARB Mini Columns Collection Tubes Elution Tubes

### Procedure

Through the chaotropic salt-contained lysis buffer (FARP), the total RNA is bound to silica fiber matrix of the spin column. After washing off the impurities by ethanol-contained wash buffer (Wash buffer 1 & 2), the ultrapure RNA is eluted by RNase-free water.

# TOTAL RNA EXTRACTION SERIES

## FavorPrep™ Blood/Cultured Cell Total RNA Mini/Maxi Kit (FABRK)

### Description

The FavorPrep™ Blood/Cultured Cell Total RNA Mini/Maxi Kit is designed for purification of total RNA from cultured cells and fresh whole blood. For blood sample, RL buffer is used for optimal lysis of erythrocytes. Detergents and chaotropic salt are used to lyse cells and inactivate RNase. The purified RNA is suitable for various downstream applications.

### Features

- ★**High Purity:** OD 260/280>1.9
- ★**High Speed:** 30~60 minutes
- ★**Safe to Use:** Eliminate the use of phenol, chloroform, ethidium bromide, and cesium chloride; minimize the exposure to hazardous materials.
- ★**Scalable Protocol:** Solution based procedure can be scaling up/down to suit the application.

### Specifications

- Format/Principle:** Spin column (silica matrix).
- Operation Time:** 30~60 minutes.
- Binding Capacity:** Mini: Up to 100 µg total RNA.  
Maxi: Up to 6 mg total RNA.
- Minimum Elution Volume:** Mini: 40 µl.  
Maxi: 500 µl.

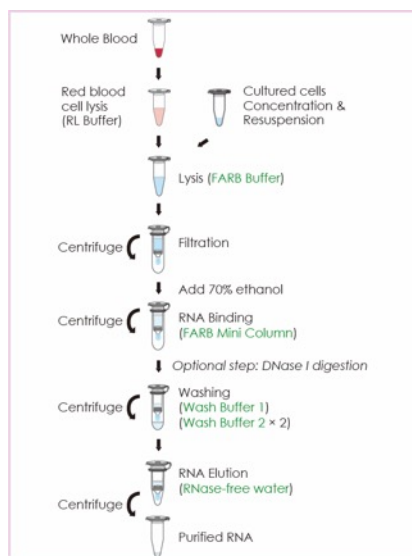
### Applications

RT-qPCR; Northern blotting hybridizations; primer extension; cDNA synthesis; mRNA selection; *in vitro* translation; microarray.

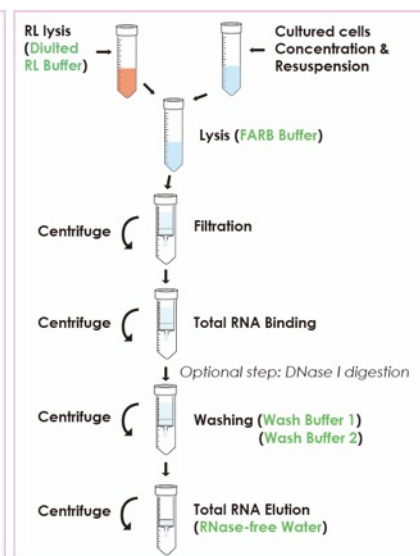
### Ordering Information

Cat. No.	Product Name	Size	Contents
FABRK 001	FavorPrep™	50 preps	RL Buffer/10X RL Buffer
FABRK 001-1	Blood/Cultured Cell	100 preps	FARB Buffer
FABRK 001-2	Total RNA Mini Kit	300 preps	Wash Buffer 1
			Wash Buffer 2 (Concentrate)
			RNase-Free Water
FABRK 003	FavorPrep™	10 preps	Filter Columns
	Blood/ Cultured Cell		FARB Mini/Maxi Columns
	Total RNA Maxi Kit		Collection Tubes
			Elution Tubes

### Mini



### Maxi



### Procedure

The method uses detergents and chaotropic salt to lyse cell and inactivate RNase, then the lysate passes through the filter column for homogenization. RNA in chaotropic salt is bound to the glass fiber matrix of column. After washing off the contaminants, the purified RNA is eluted by RNase-Free Water.

# TOTAL RNA EXTRACTION SERIES

## FavorPrep™ Total RNA Isolation Kit II (FATRS)

### Description

The FavorPrep™ Total RNA Isolation Kit II is a column-based RNA extraction kit that is designed to isolate high-quality total RNA from culture cells and animal tissue; the whole process is within 30 minutes. The kit includes RNase-free lysis and wash solutions that prevent RNA from RNases in the lysed sample. The purified RNA is ready-to-use for RT-PCR and other downstream applications.

### Features

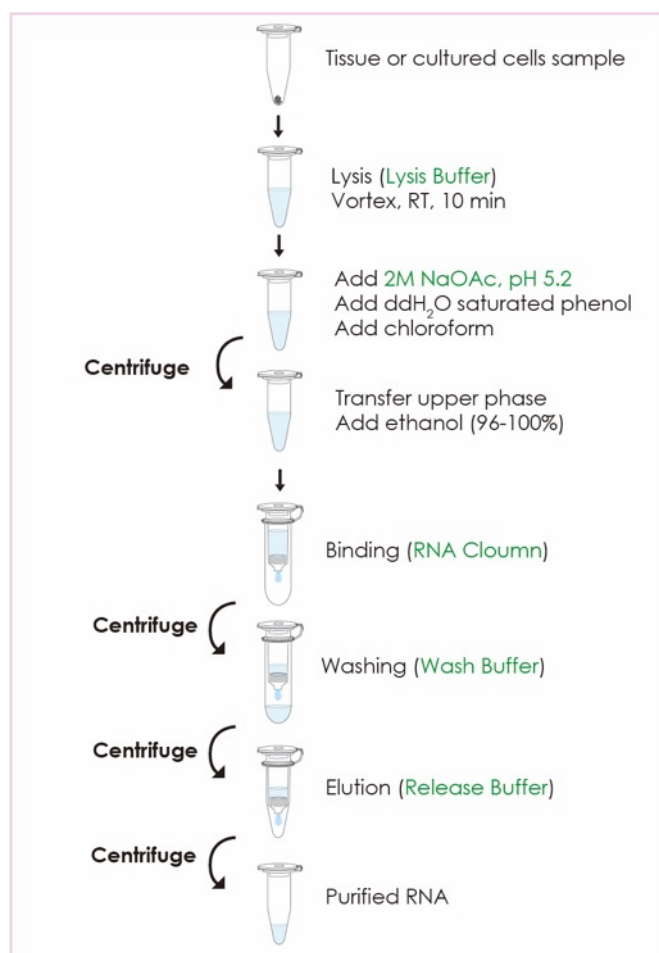
- ★**High Purity:** OD260/280: >1.9
- ★**Rapid:** Fast extraction within 30 minutes.
- ★**High quality:** The extracted RNA is ready-to-use for various downstream and highly sensitive applications.

### Specifications

- Format/Principle:** Mini spin column (silica matrix).
- Sample Size:** Up to  $1 \times 10^6$  cultured cells; Up to 100 mg tissue.
- Operation Time:** ≤30 minutes.
- Column Applicability:** Centrifugation and vacuum.

### Applications

RT-qPCR; Northern blotting hybridizations; primer extension; cDNA synthesis; mRNA selection; *in vitro* translation; microarray.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FATRS 050	FavorPrep™	50 preps	Lysis Buffer 2M NaOAc, pH5.2
FATRS 100	Total RNA Isolation Kit II	100 preps	Wash Buffer (Concentrate) Release Buffer RNA Columns Collection Tubes

### Procedure

The method uses special buffer contained detergents and chaotropic salt to lyse cell and inactivate RNase (Lysis Buffer). Followed, the 2M NaOAc, water saturated phenol, and chloroform mixture separate RNA (aqueous phase) from DNA and protein. After transfer the aqueous phase into a new eppendorf, RNA in chaotropic salt and appropriate ethanol concentration is bound to the silica matrix of column (RNA Column). After washing off the contaminants (Wash Buffer), the purified RNA is eluted by Release Buffer.

# TOTAL RNA EXTRACTION SERIES

## FavorPrep™ Whole Blood RNA Mini Kit (FAWBR)

### Description

The FavorPrep™ Whole Blood RNA Mini Kit is designed for rapid and efficient isolation of total RNA from frozen and fresh whole blood samples. The kit uses a chaotropic salt-based formula for cell lysis, RNase inactivation and RNA binding (>200 nt, e.g., 18S, 28S RNA, pri-miRNA) to silica membrane. The optional on-column DNase I digestion technique offers a convenient DNA removal method. The high-purity RNA is eluted from the membrane by using a low-ionic-strength buffer. This extracted total RNA is ready-to-use for downstream applications, such as real-time RT-PCR, cDNA synthesis, Northern blotting, primer extension, miRNA selection, etc.

### Features

- ★**Rapid:** Fast extraction within 30 minutes.
- ★**High Quality:** The purified RNA is ready-to-use for various of applications, including amplification, digestion, PCR, etc.
- ★**Safe to Use:** Eliminate the use of phenol, chloroform, and cesium chloride; minimize the exposure to hazardous materials.

### Specifications

- Format/Principle:** Mini spin column (silica matrix)
- Sample Size:** 200~400 µl whole blood
- Size of Isolated RNA:** >200 nucleotides
- Typical RNA Yield:** 5~7 µg/ 1 ml whole blood
- Operation Time:** ≤50 minutes
- Binding Capacity:** Up to 100 µg/RNA binding column
- Column Applicability:** Centrifugation and vacuum
- Minimum Elution Volume:** 20 µl/RNA binding column

### Applications

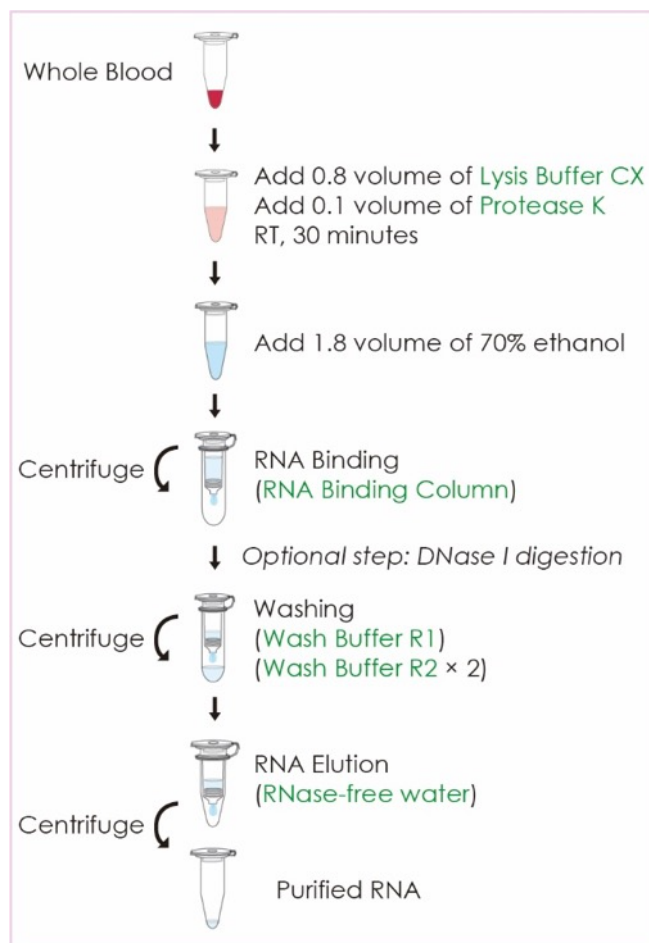
RT-qPCR; Northern blotting hybridizations; primer extension; cDNA synthesis; mRNA selection; *in vitro* translation; microarray.

### Ordering Information

Cat. No.	Product Name	Size	Contents
FAWBR 050 FAWBR 100	FavorPrep™ Whole Blood RNA Mini Kit	50 preps 100 preps	Lysis Buffer CX Wash Buffer R1 (Concentrate) Wash Buffer R2 (Concentrate) RNase-Free Water Proteinase K RNA Binding Columns Collection Tubes Elution Tubes

### Procedure

The method uses detergents, chaotropic salt and proteinase K to lyse cells and inactivate RNases. The RNA in Lysis Buffer CX is bound to silica fiber matrix of RNA Binding Column. The optional DNase I treatment efficiently removes residual DNA; the impurities are washed off with the ethanol-contained wash buffer (Wash Buffer R1 or R2). Finally, the purified total RNA is eluted by RNase-free water.





# VIRAL NUCLEIC ACID SERIES

## FavorPrep™ Viral DNA/RNA Kit (FAVNK)

### Description

FavorPrep™ Viral DNA/RNA Kit is specifically designed for extraction of highly pure viral nucleic acid from viruses contained cell-free specimen. It is exclusively intended to be used only by trained professionals. The carrier RNA included in this kit improves the ability to viral RNA binding to the VNE Column, especially in low-titer specimens. The guanidium salt contained buffer formula inactivates viruses and prevents the residual nuclease activity of viral DNA or RNA from degradation. This kit provides a reliable and efficient way to extract high-purity viral nucleic acid; total operation time can be shortened to 30 minutes.



### Features

- ★ **High Recovery:** Carrier RNA is provided, specifically for low-viral-load samples.
- ★ **High Purity:** Complete removal of contaminants and inhibitors for reliable downstream applications.
- ★ **High Speed:** Rapid purification of high-quality viral DNA and RNA within 30 minutes.

### Specifications

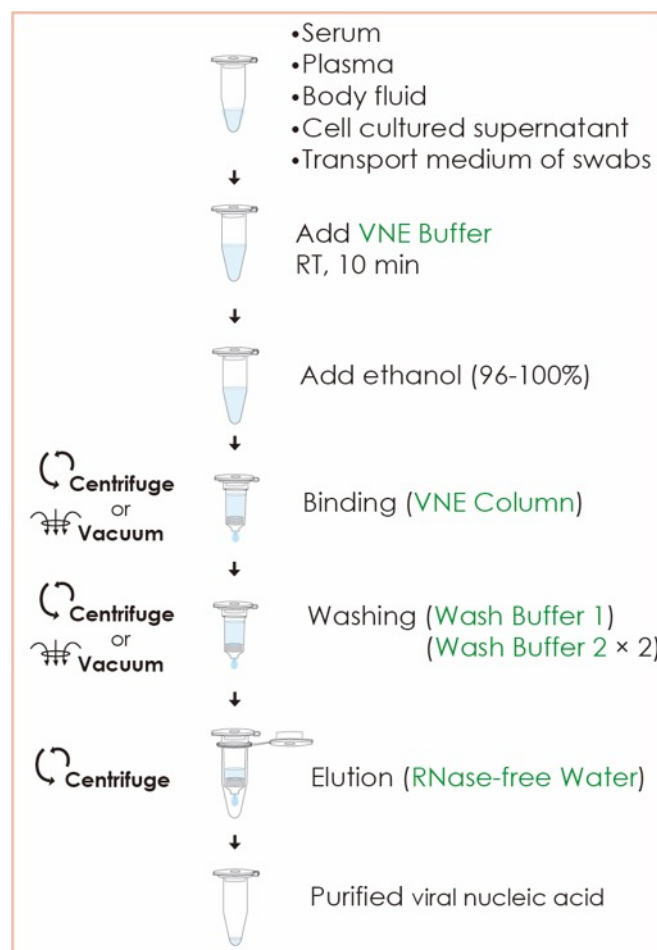
- Format/Principle:** Spin column/Silica membrane/Chaotropic salt.
- Sample Size:** 140 µl cell-free fluid such as serums, plasma, body fluids, and cell-cultured supernatants and transport medium of swabs.
- Operation Time:** <20 mins
- Recovery Rate:** 80~90 %
- Length of Recovery Nucleic Acid:** >200 bp
- Column Binding Capacity:** 60 µg RNA/column
- Elution Volume:** 30~60 µl
- Column Applicability:** Centrifugation and vacuum

### Applications

RT-PCR: qPCR

### Ordering Information

Cat. No.	Product Name	Size	Contents
FAVNK 001	FavorPrep™ Viral DNA/RNA Kit	50 preps	VNE Buffer
FAVNK 001-1		100 preps	Carrier RNA
FAVNK 001-2		300 preps	Wash Buffer 1 (Concentrate)
			Wash Buffer 2 (Concentrate)
			RNase-free Water
			VNE Columns
			Collection Tubes
			Elution Tubes



### Procedure

The method uses detergents and chaotropic salt buffer (VNE Buffer) to lyse viruses-contained samples. The provided carrier RNA enhances the efficiency of viral DNA/RNA binding to the silica membrane. After washing off the contaminants (Wash Buffer 1 & 2), highly pure viral RNA is eluted from the silica membrane by RNase-free water.

# VIRAL NUCLEIC ACID SERIES

## FavorPrep™ Viral Nucleic Acid Extraction Kit II (FAVNK II)

### Description

The FavorPrep™ Viral Nucleic Acid Extraction Kit II is specifically designed to isolate high-quality viral nucleic acids from RNA or DNA viruses within 20 minutes. The kit provides quick protocol for samples with a higher viral loading capacity due to additional AD Buffer for DNA/RNA binding. The purity of extracted nucleic acids allows the use for various downstream applications.

### Features

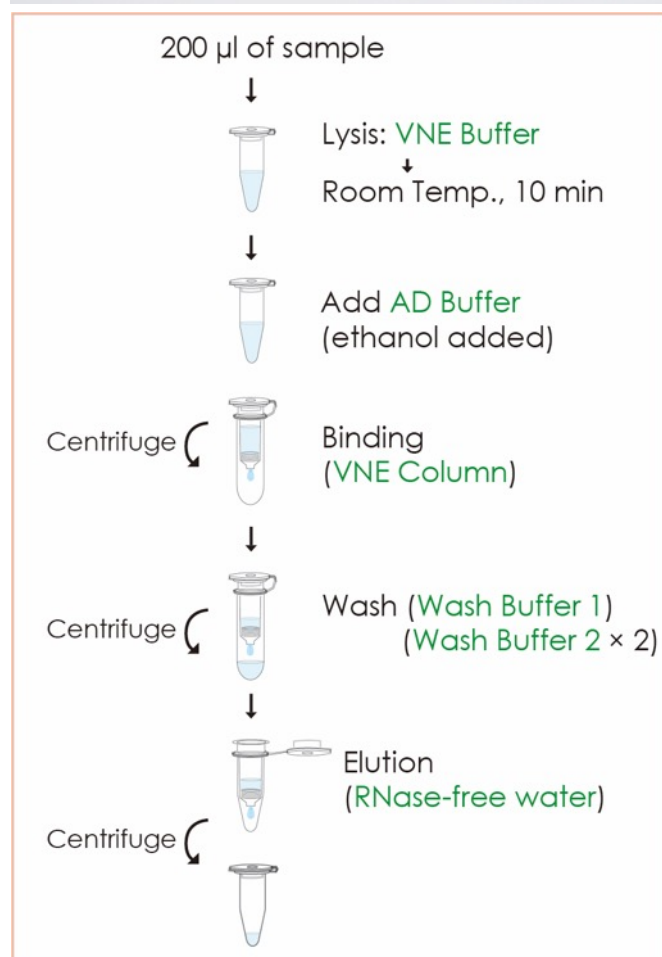
- ★**High Recovery:** Unique AD Buffer samples with higher viral loading capacity.
- ★**High Purity:** Complete removal of contaminants and inhibitors for reliable downstream applications.
- ★**High Speed:** Rapid purification of high-quality viral DNA or RNA within 20 minutes.

### Specification

- Format/Principle:** Spin column (silica membrane)
- Sample Size:** 200 µl cell-free fluid such as serum, plasma, body fluid and cell cultured supernatant.
- Operation Time:** 20 minutes
- Recovery Rate:** 70~90 %
- Length of Recovered Nucleic Acid:** >200 bp
- Column Binding Capacity:** 60 µg RNA/column
- Elution Volume:** 30~60 µl

### Applications

RT-PCR; qPCR.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAVNK 002	FavorPrep™	50 preps	AD Buffer (Concentrate) VNE Buffer
FAVNK 002-1	Viral Nucleic Acid	100 preps	Wash Buffer 1 (Concentrate) Wash Buffer 2 (Concentrate)
FAVNK 002-2	Extraction Kit II	300 preps	RNase-free Water VNE Columns Collection Tubes Elution Tubes

### Procedure

The method uses detergents and chaotropic salt (VNE buffer) to inactivate and lyse virus. Ethanol-added AD Buffer optimizes the binding condition for viral DNA or RNA to the silica membrane. After washing off the contaminants (Wash Buffer 1 & 2), highly pure viral RNA is eluted from the silica membrane by RNase-free water.

# SMALL FRAGMENT NUCLEIC ACID EXTRACTION SERIES

## FavorPrep™ miRNA Isolation Kit (FAMIK)

### Description

FavorPrep™ miRNA Isolation Kit is designed for purification of microRNAs (miRNAs) and other small cellular RNAs from tissue or cultured cells. Different from general RNA isolation kits, this kit was designed specifically for small RNAs with minimal contamination from large RNA molecules or genomic DNA. Purification of small RNAs allows researchers to study functional roles of miRNA in various biological pathways and gene regulations.

### Features

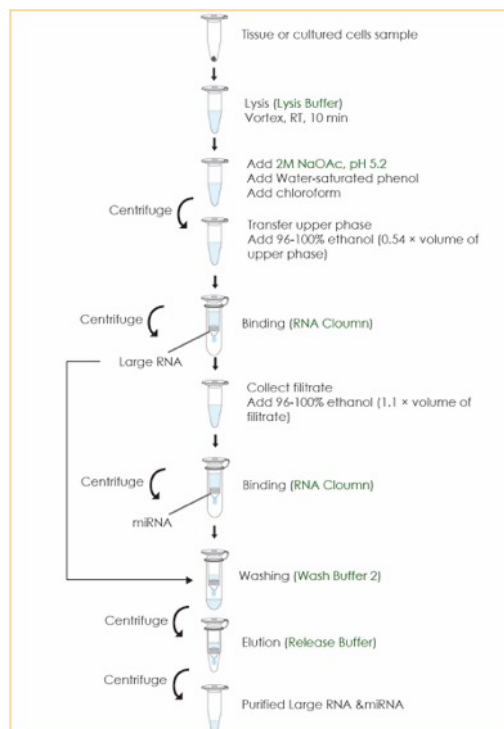
- ★**Compatible:** Available for various cell and tissue types.
- ★**Efficient:** Enrich and recover small RNA fragments; remove predominant larger RNAs.
- ★**Time Saving:** 30 minutes.

### Specifications

- Format/Principle:** Mini spin column (silica matrix).
- Sample Size:** Up to 1 x10<sup>6</sup> cultured cells; Up to 100 mg tissue.
- Operation Time:** 30 minutes.
- Column Applicability:** Centrifugation and vacuum.

### Applications

RT-qPCR; Northern blotting hybridizations; *in vitro* translation; microarray.



### Procedure

The method uses organic buffers, detergents and chaotropic salt to lyse cells and inactivate RNases. At the beginning, the sample mixing with lysis buffer and incubation at room temperature for 10 minutes to lyse sample. Mixing the lysate with 2M NaOAc (pH5.2), water-saturated phenol, and chloroform to purify RNA. After centrifuge, transfer the upper phase into a new eppendorf and adding ethanol then apply to RNA column, large RNA fragments can be removed. Collect filtrate and adding ethanol at 1.1 times of filtrate volume. After small RNA specialized binding to RNA Column and washing out the impurities (Wash Buffer 2), the small RNAs are eluted by Release Buffer.

### Ordering Information

Cat. No.	Product Name	Size	Contents
FAMIK 001	FavorPrep™	100 preps	Lysis Buffer 2M NaOAc, pH5.2
FAMIK 002	miRNA Isolation Kit	50 preps	Wash Buffer 2 (Concentrate) Release Buffer RNA Columns Collection Tubes

# SMALL FRAGMENT NUCLEIC ACID EXTRACTION SERIES

## FavorPrep™ Circulating Nucleic Acid Isolation Kit (FACFK)

### Description

FavorPrep™ Circulating Nucleic Acid Isolation Kit is designed for rapid and efficient purification of circulating cell-free nucleic acids. The system utilizes silica column with column extender to purify cell-free nucleic acids; the effective sample volume is 1 ml to 5 ml. The optimized buffers are developed to permit efficient recovery (<1000 bps in DNA; <1000 nts in RNA) of cell-free nucleic acids. The recovered nucleic acids are suitable for a wide range of down-stream applications, such as bisulfite sequencing, NGS and qPCR.



### Features

- ★ **Efficient:** Efficient isolation of cell-free DNA (<1000 bps) and RNA (<1000 nts) from 1-5 ml plasma or serum samples.
- ★ **High Purity:** Complete removal of contaminants and inhibitors for reliable downstream applications.
- ★ **Time Saving:** Rapid purification of high-quality cell-free DNA and RNA within 60 minutes.

### Specifications

**Format/Principle:** Mini spin column (silica matrix)

**Sample Size:** 1~5 ml human plasma or serum

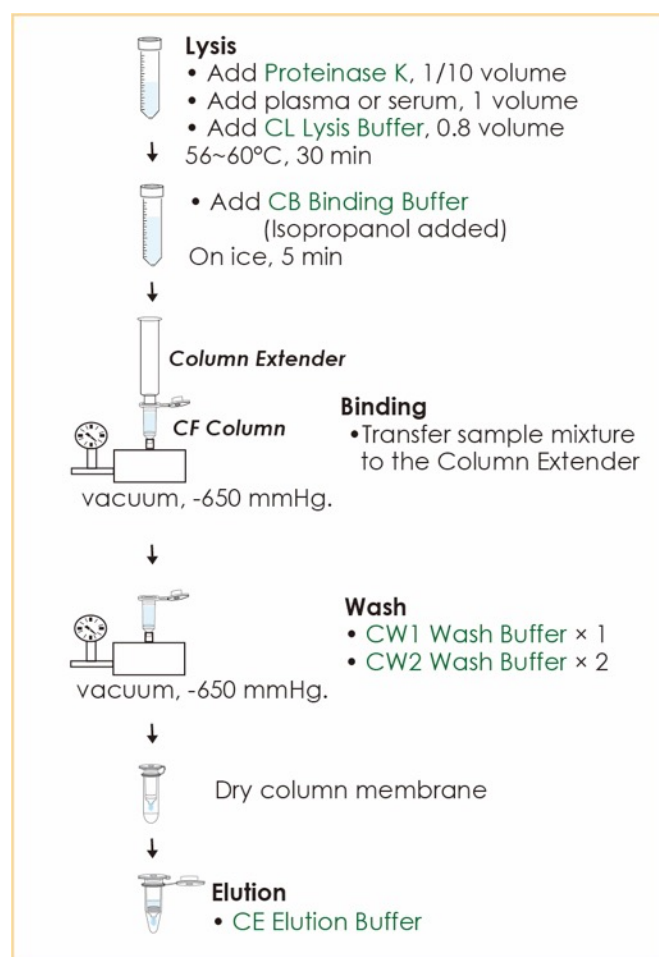
**Operation Time:** 30~60 minutes

**Minimum Elution Volume:** 40 µl

**Column Applicability:** Centrifugation and vacuum

### Applications

PCR; real-time PCR; NGS; precision medicine; disease diagnostics.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FACFK 050	FavorPrep™ Circulating Nucleic Acid Isolation Kit	50 preps	CL Lysis Buffer CB Binding Buffer (Concentrate) CW1 Wash Buffer (Concentrate) CW2 Wash Buffer (Concentrate) CE Elution Buffer Proteinase K (Lyophilized) CF Columns Collection Tubes Elution Tubes Column Extender

### Procedure

The liquid sample (plasma or serum) is mixed with Proteinase K and CL Lysis Buffer. After plus-vortexing, incubate the sample/buffer mixture at 56-60°C to lyse sample. The special binding buffer (CB) improves the binding affinity of cell-free nucleic acids to CF Column. The unique designed Column Extender allows the large volume of lysate being applied into CF Column by using the vacuum manifold. The CF column is washed with wash buffers (CW1 & CW2), then the purified circulating nucleic acids are eluted with CE Elution Buffer.



# 96-WELL PLATE EXTRACTION SERIES

## FavorPrep™ 96-Well PCR Clean-Up Kit (FACKE)

### Description

The FavorPrep™ 96-Well PCR Clean-Up Kit is designed for high-throughput cleaning up of DNA fragments from PCR product or other enzymatic reactions. This kit uses 96-well DNA binding plate and special size-selection buffers; the range of DNA size is between 65 bp~10 kbp; the 20~40 oligonucleotide fragments will be removed. The purified DNA is ready-to-use for various applications with three easy steps (binding, washing and elution).

### Features

- ★ **High Recovery:** Up to 85% recovery rate.
- ★ **Quick:** The procedure ensures parallel purification up to 96 PCR samples.
- ★ **High Quality:** Recover high-quality DNA; ready-to-use for common downstream applications.
- ★ **Safe:** No phenol/chloroform extraction and ethanol precipitation step.

### Specifications

**Format/Principle:** Filter Plate (96-well plate, silica membrane)

**Plate Applicability:** Vacuum or centrifugation

**Sample Size:** 10~100 µl PCR mixture or other enzymatic reaction mixture

**DNA Size:** 65 bp~10 kbp

**Operation Time:** <45 mins/96 preparations

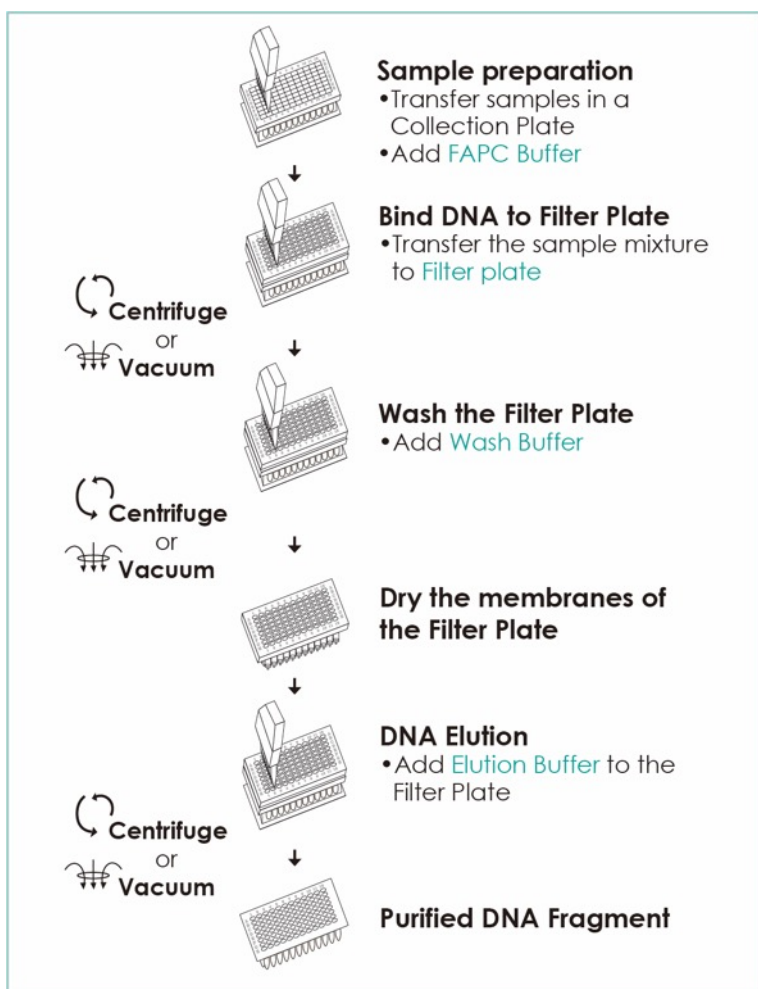
**Typical Recovery:** 75%-85%

**DNA Binding Capacity:** 20 µg/well

**Elution Volume:** 50~75 µl

### Applications

Fluorescent or radioactive sequencing; restriction enzyme digestion; library screening; ligation & transformation; DNA labeling.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FACKE 96001	FavorPrep™	1 plate	FAPC Buffer
FACKE 96002	96-Well PCR	2 plates	Wash Buffer (Concentrate)
FACKE 96004	Clean-Up Kit	4 plates	Elution Buffer
			Filter Plate (96-Well DNA Binding Plate)
			Collection Plate (96-Well 2 ml Plate)
			Elution Plate (96-Well PCR Plate)
			Adhesive Film

### Procedure

In this procedure, both vacuum and centrifugation methods are compatible. The pH indicator contained chaotropic salt buffer (FAPC) helps DNA binding on silica-fiber matrix of the Filter Plate. After washing steps (Wash Buffer), the impurities (e.g., primers, nucleotides, salts, enzyme) are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or

# 96-WELL PLATE EXTRACTION SERIES

## FavorPrep™ 96-Well GEL Purification Kit (FAGKE)

### Description

FavorPrep™ 96-well GEL Purification Kit is designed to rapidly recover DNA fragments from TAE and TBE agarose gels. This kit includes silica membrane based high-throughput 96-well binding plate for DNA binding and has a high recovery rate from target agarose gels. The purified DNA fragments are ready-to-use for DNA sequencing, restriction enzyme digestion, DNA labeling and ligation reactions.

### Features

- ★ **High Recovery:** Up to 85% recovery rate from target agarose gels.
- ★ **Quick:** The procedure allows parallel purification up to 96 agarose gel samples.
- ★ **High Quality:** Recover high-quality DNA; ready-to-use for common downstream applications.
- ★ **Safe:** No caustic organic compounds.

### Specifications

**Format/Principle:** Filter Plate (96-well plate, silica membrane)

**Plate Applicability:** Vacuum or centrifugation

**Sample Size:** Up to 200 mg agarose gel slice

**DNA Size:** 65 bp~10 kbp

**Operation Time:** ≤45 minutes/96 preparations

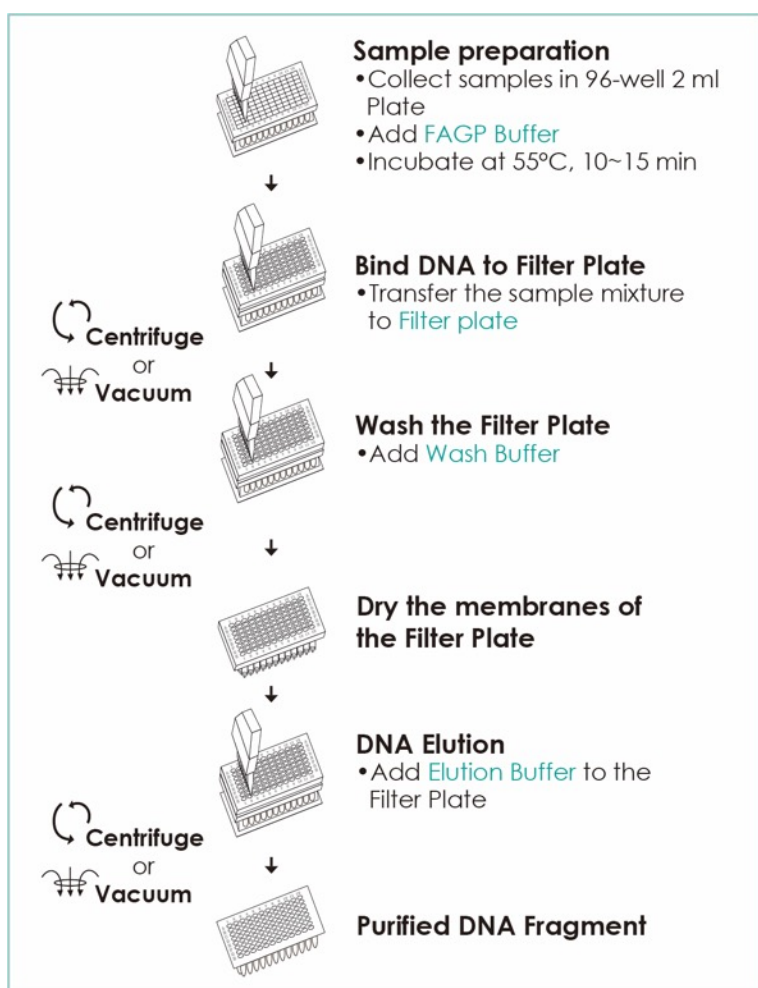
**Typical Recovery:** 70%-85%

**DNA Binding Capacity:** 20 µg/well

**Elution Volume:** 50~75 µl

### Applications

Fluorescent or radioactive sequencing; restriction enzyme digestion; library screening; ligation and transformation; DNA labeling.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAGKE 96001	FavorPrep™ 96-Well GEL Purification Kit	1 plate	FAGC Buffer
FAGKE 96002		2 plates	Wash Buffer (concentrate)
FAGKE 96003		4 plates	Elution Buffer
FAGKE 96004			Filter Plate (96-Well DNA Binding Plate)
			Collection Plate (96-Well 2 ml Plate)
			Elution Plate (96-Well PCR Plate)
			Adhesive Film

### Procedure

In this procedure, both vacuum and centrifugation methods are compatible. The method uses a pH indicator contained chaotropic salt buffer (FAGP) to dissolve the agarose gel. The DNA fragments in FAGP Buffer are bound to silica-fiber matrix of the 96-Well Filter Plate. After washing steps (W1 Buffer and Wash Buffer), the impurities (e.g., primers, nucleotides, salts, agarose, ethidium bromide) are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or water.

# 96-WELL PLATE EXTRACTION SERIES

## FavorPrep™ 96-Well GEL/PCR Clean-Up Kit (FAPKE)

### Description

FavorPrep™ 96-well Gel/PCR Clean-Up Kit is designed for 96 wells high-throughput purification of DNA fragments from agarose gels, PCR mixtures or enzymatic reaction mixtures. The unique multi-purposes kit effectively reduces cost in molecular biological laboratory. The purified DNA fragments are ready-to-use for DNA sequencing, restriction enzyme digestion, DNA labeling and ligation reactions.

### Features

- ★ **Easy and Fast:** One buffer for PCR clean-up and gel extraction; up to 96 agarose gels or PCR samples.
- ★ **Versatile:** Purify DNA from agarose gels, PCR mixtures or other enzymatic reactions mixtures. The recovery-fragment size is between 65 bp~10 kbp.
- ★ **Safe:** No phenol/chloroform and other caustic organic compounds.

### Specifications

**Format/Principle:** Filter plate (96-well plate, silica membrane)

**Sample Size:** Up to 200 mg agarose gel slice; Up to 100 µl PCR or other enzymatic reaction mixtures.

**DNA Size:** 65 bp~10 kbp

**Plate Applicability:** Vacuum or centrifugation

**Operation Time:** ≤ 45 minutes for gel DNA extraction; ≤35 minutes for PCR clean up.

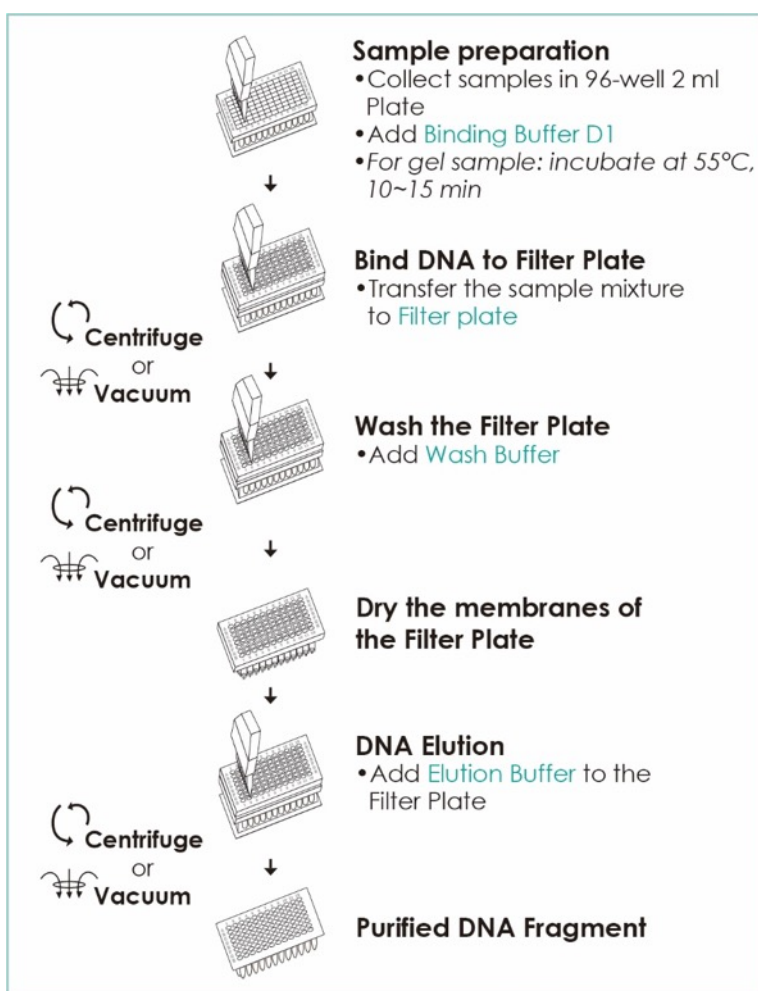
**Typical Recovery:** 70%~85%

**DNA Binding Capacity:** Up to 20 µg/well

**Elution Volume:** 50~75 µl

### Applications

PCR; fluorescent or radioactive sequencing; restriction enzyme digestion; DNA labeling; ligation and transformation.



### Procedure

In this procedure, both vacuum and centrifugation methods are compatible. The method uses a pH indicator contained chaotropic salt buffer (Buffer D1) to dissolve the agarose gel and provide suitable environment for DNA binding. The DNA fragments in Binding Buffer D1 are bound to silica-fiber matrix of 96-Well Filter Plate. After the washing steps (Wash Buffer), the impurities (e.g., primers, nucleotides, salts, agarose, ethidium bromide) are completely removed. Finally, the purified DNA is eluted by low-salt elution buffer or pure water.

### Ordering Information

Cat. No.	Product Name	Size	Contents
FAPKE 96001	FavorPrep™	1 plate	Binding Buffer D1
FAPKE 96002	96-Well GEL/PCR	2 plates	Wash Buffer (Concentrate)
FAPKE 96004	Clean-Up Kit	4 plates	Elution Buffer Filter Plate (96-Well DNA Binding Plate) Collection Plate (96-Well 2 ml Plate) Elution Plate (96-Well PCR Plate) Adhesive Film



# 96-WELL PLATE EXTRACTION SERIES

## FavorPrep™ 96-Well Genomic DNA Kit (FADWE)

### Description

FavorPrep™ 96-Well Genomic DNA Kit is specially designed for purification of total DNA (including genomic, mitochondrial, and viral DNA) from a wide variety of animal samples. Each sample type uses specialized lysis procedure and optimized lysis buffer to enhance proteinase K activity. DNA in chaotropic salt is bound to special 96-Well Filter plate in a batch. After washing and elution procedure, the purified DNA is ready-to-use for multiple applications, such as qPCR and library preparation in NGS sequencing.

### Features

- ★**Time Saving:** Rapid isolation of genomic DNA from tissue samples within 90 mins (depending on the sample type).
- ★**Quick:** The procedure allows parallel purification up to 96 samples.
- ★**Flexibility:** Extraction of genomic DNAs from various types of tissue, cultured cells or whole blood, buffy coat, body fluids, etc.
- ★**Safe:** No caustic organic compounds.

### Specification

**Format/Principle:** 96- well DNA binding plate (silica membrane)

**Sample Size:** Up to 200 µl fresh/frozen whole blood, buffy coat, serum, plasma, body fluids; up to 25 mg animal tissue; up to 5×10<sup>6</sup> animal cultured cells.

**Plate Applicability:** Vacuum and centrifugation

**Operation Time:** Within 90 mins/96 preparations

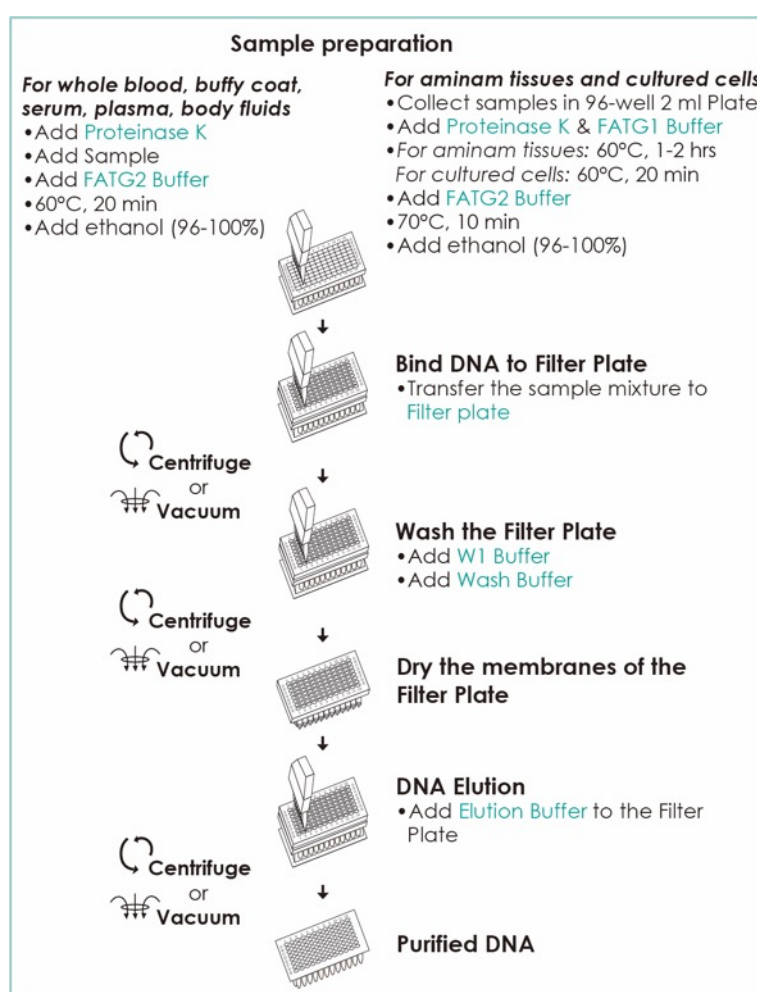
**Binding Capacity:** Up to 30 µg/well

**Elution Volume:** 75~200 µl

**Expected Yield:** 4~12 µg whole blood; 15~20 µg animal culture cells; 5~30 µg animal tissue.

### Applications

PCR; AFLP; RFLP; Southern blotting; real-time PCR.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FADWE 96001	FavorPrep™	1 plate	FATG1 Buffer
FADWE 96002	96-Well Genomic	2 plates	FATG2 Buffer
FADWE 96004	DNA Kit	4 plates	W1 Buffer (Concentrate) Wash Buffer (Concentrate) Elution Buffer Proteinase K Filter Plate (96-Well DNA Binding Plate) Collection Plate (96-Well 2 ml Plate) Elution Plate (96-Well PCR Plate) Adhesive Film

### Procedure

In this procedure, both vacuum and centrifugation methods are compatible. The method uses proteinase K and chaotropic salt-guanidine hydrochloride (FABG) to lyse cells and degrade protein. Then, genomic DNA is bound to glass fiber matrix of the plate. The impurities and other unwanted particles are removed in the washing steps with W1 and Wash buffer. The purified plasmid DNA is eluted by elution buffer or water.



# 96-WELL PLATE EXTRACTION SERIES

## FavorPrep™ 96-Well Plant Genomic DNA Extraction Kit (FAPGE)

### Description

The FavorPrep™ 96-Well Plant Genomic DNA Extraction Kit is an efficient and easy-to-use tool and specially designed for genomic DNA extraction from plant tissue or cultured plant cells. The kit includes optimized formulated lysis buffer to lyse plant cells and remove polysaccharides from the sample mixture; the 96-Well Filter Plate removes unwanted particles. Silica-based 96-Well DNA Binding plate and FAPG3 Buffer are specially designed for plant genomic DNA extraction that enables optimal performance. The whole procedure allows parallel purification up to 96 plant samples in less than one hour.

### Feature

- ★**Quick:** The procedure allows parallel purification up to 96 samples.
- ★**Safe:** Effectively remove proteins and nuclease in cells; not necessary to treat the sample with harmful organic solvents.
- ★**Versatile:** Extract plant genomic DNA from various plant sources.
- ★**High Quality:** Isolate high-quality DNA suitable for a variety of applications.

### Specification

**Sample Amount Size:** Up to 50 mg of fresh or frozen plant tissue; up to 15 mg of dry plant tissue; up to 5×10<sup>6</sup> plant cells.

**Operation Time:** 60 minutes

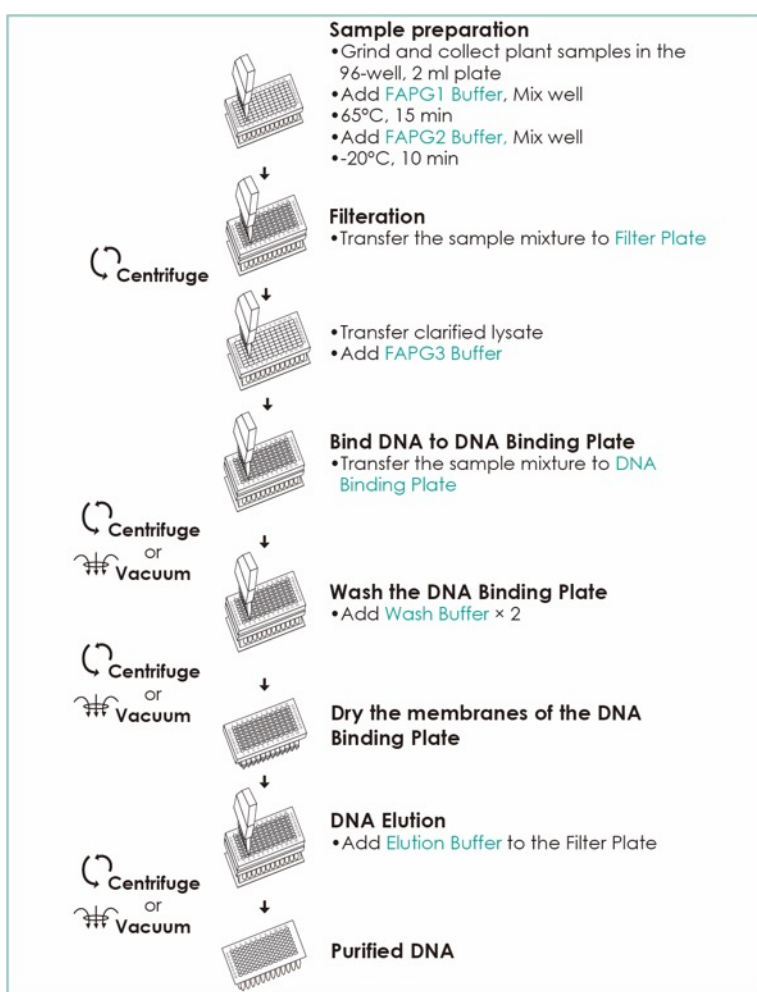
**Binding Capacity:** Up to 40 µg total DNA

**Expected Yield:** 5~35 µg

**Elution Volume:** 100~200 µl

### Applications

PCR; qPCR; Southern blotting; DNA sequencing; SNP genotyping.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAPGE 96001 FAPGE 96002 FAPGE 96004	FavorPrep™ 96-Well Plant Genomic DNA Extraction Kit	1 plate 2 plates 4 plates	FAPG1 Buffer FAPG2 Buffer FAPG3 Buffer (Concentrate) Wash Buffer (Concentrate) Elution Buffer RNase A (Lyophilized) 96-Well DNA Binding Plate 96-Well Filter Plate Elution Plate (96-Well PCR Plate) Adhesive Film

### Procedure

In this procedure, both vacuum and centrifugation methods are compatible. Plant tissue is treated with liquid nitrogen and ground into fine powder. The crushed plant tissue is lysed by FAPG1 (RNase A contained) and FAPG2 Buffer. The 96-Well Filter Plate removes tissue debris in lysate. The genomic DNA in the lysate is bound to the silica matrix of the 96-Well DNA Binding Plate. After washing off the contaminants (Wash buffer), the purified plant DNA is eluted by low-salt elution buffer or water.

# 96-WELL PLATE EXTRACTION SERIES

## FavorPrep™ 96-Well Plasmid DNA Extraction Kit (FAPWE)

### Description

The FavorPrep™ 96-Well Plasmid DNA Extraction Kit is designed for high throughput isolation of plasmid DNA. The technology is based on alkaline lysis followed by adsorption of DNA onto silica membrane in the presence of chaotropic salt. The extracted DNA can be used in a variety of applications such as PCR, cloning, sequencing, *in vitro* transcription and labeling.

### Features

- ★ **Efficient:** High yield of plasmid DNA (up to 20 µg from 1~5 ml overnight cultures).
- ★ **Convenient:** No need for phenol, chloroform and alcohol precipitation; minimize the expose to hazardous materials.
- ★ **High Quality:** Optimized buffers are included for maximum of DNA purity and yield.

### Specification

**Format/Principle:** Filter plate (96-well plate, glass fiber membrane)

**Sample Size:** 1~5 ml culture / preparation

**Processing:** Vacuum or centrifugation

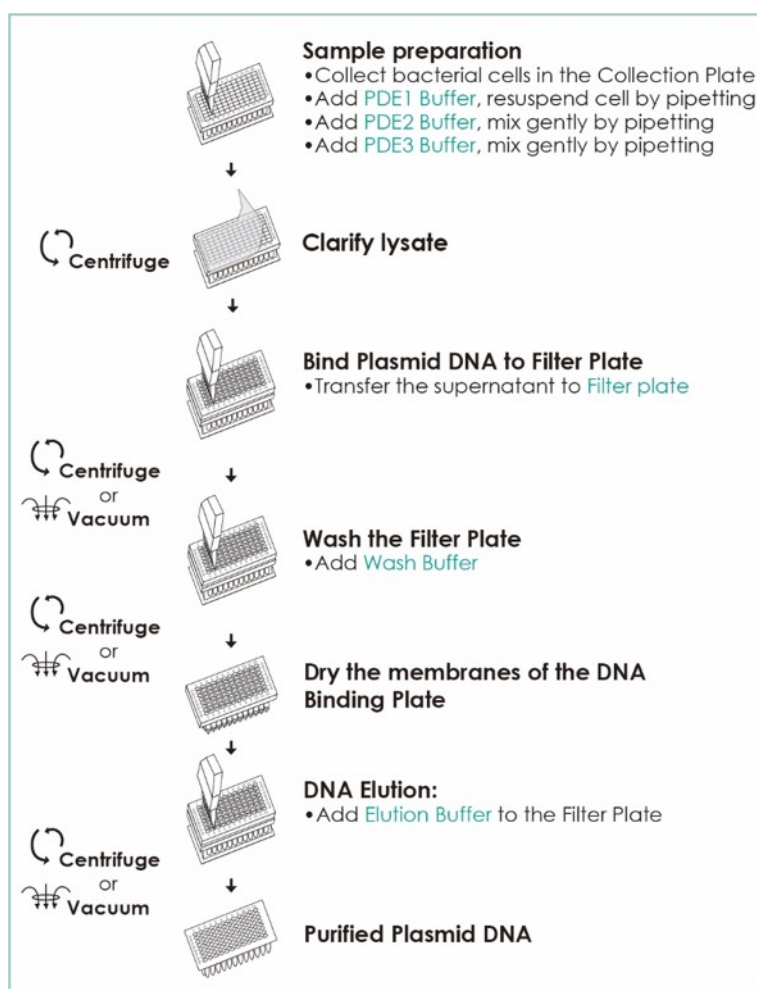
**Operation Time:** Within 60 mins/96 preparations

**Binding Capacity:** Up to 60 µg / well

**Elution Volume:** 50~75 µl

### Applications

Fluorescent or radioactive sequencing; restriction enzyme digestion; library screening; ligation and transformation; DNA sequencing; transfection of robust cells; *in vitro* translation.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAPWE 96001	FavorPrep™	1 plate	FAPD1 Buffer
FAPWE 96002	96-Well Plasmid	2 plates	FAPD2 Buffer
FAPWE 96004	DNA Extraction Kit	4 plates	FAPD3 Buffer
			Wash Buffer (Concentrate)
			Elution Buffer
			RNase A (Lyophilized)
			Filter Plate (96-Well Plasmid Binding Plate)
			Collection Plate (96-Well 2 ml Plate)
			Elution Plate (96-Well PCR Plate)
			Adhesive Film

### Procedure

In this procedure, both vacuum and centrifugation methods are compatible. Bacterial culture is harvested, lysed, and then neutralized. The modified alkaline lysis method and RNase A treatment are used to make cleared cell lysate with minimal genomic DNA and RNA contamination. In the presence of chaotropic salt, the plasmid DNA in the lysate is bound to the glass fiber matrix of the Filter Plate (96-Well Plasmid Binding plate). The impurities and other unwanted particles are removed in the washing steps with WF and Wash buffer. The purified plasmid DNA is eluted by elution buffer or water.

# 96-WELL PLATE EXTRACTION SERIES

## FavorPrep™ 96-Well Total RNA Kit (FATRE)

### Description

FavorPrep™ 96-Well Total RNA Kit is designed for 96 wells high-throughput phenol-free isolation of total RNA from animal cultured cells or animal tissues by using chaotropic salt-based lysis/denaturant and silica membrane column. This kit offers a speedy method to purify total RNA and prevent the degradation of RNA by inactivating RNase during the isolation procedure. The purified RNA is ready-to-use in RT-PCR, Northern blotting, primer extension and cDNA construction.

### Features

- ★ **Quick:** The procedure allows parallel purification of up to 96 PCR samples.
- ★ **High Quality:** Purify high-quality RNA which is ready-to-use in downstream applications.
- ★ **Safe:** No phenol/chloroform extraction or ethanol precipitation steps.
- ★ **Flexibility:** Available for total RNA extract from several types of tissue and cultured cells.

### Specification

**Format/Principle:** Filter plate (96-well plate, silica membrane)

**Sample Size:** Animal cells up to  $1 \times 10^7$ /preparation; animal tissue up to 50 mg tissues/preparation.

**Plate Applicability:** Vacuum or centrifugation

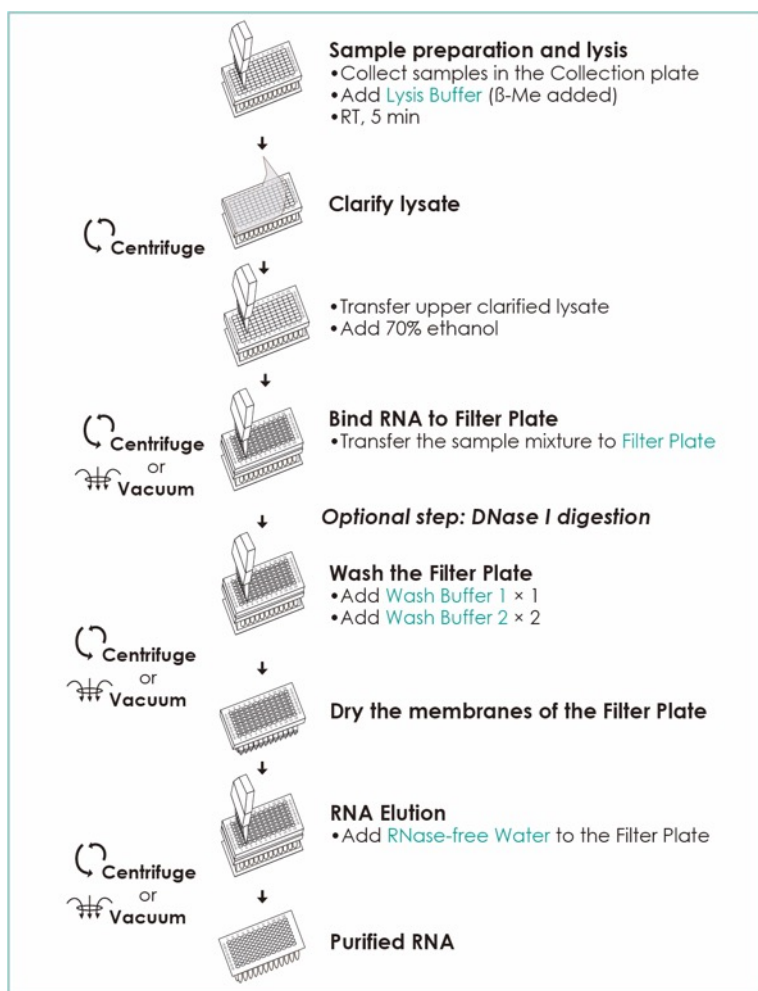
**Operation Time:** <60 mins/96 preparations

**RNA Binding Capacity:** Up to 75 µg/well

**Elution Volume:** 50~75 µl

### Applications

RT-PCR; quantitative RT-PCR; differential display; cDNA synthesis; Northern blot analysis; primer extension; mRNA selection; microarray.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FATRE 96001 FATRE 96002 FATRE 96004	FavorPrep™ 96-Well Total RNA Kit	1 plate 2 plates 4 plates	Lysis Buffer Wash Buffer1 (Concentrate) Wash Buffer2 (Concentrate) RNase-free Water Filter Plate (96-Well RNA Binding Plate) Collection Plate (96-Well 2 ml Plate) Elution Plate (96-Well PCR Plate) Adhesive Film

### Procedure

In this procedure, both vacuum and centrifugation methods are compatible. The method utilizes chaotropic salt buffer (Lysis buffer) to lyse cell and inactivate RNase. The optional on-column DNase I digestion remove DNA residues. After washing off the contaminants (Wash Buffer 1 & 2), the purified RNA is eluted by RNase-free water.



# 96-WELL PLATE EXTRACTION SERIES

## FavorPrep™ 96-Well Viral DNA/RNA Extraction Kit (FAVRE)

### Description

The FavorPrep™ 96-Well DNA/RNA Extraction Kit provides a high-throughput, rapid and economical method to purify viral DNA/RNA from cell-free samples, such as serum, plasma, body fluids and the supernatant of viral-infected cell culture. The steps of DNA/RNA binding, washing and elution can be processed on most common 96-well plate vacuum manifold and 96-well centrifuge rotors. The entire process can be completed within 60 minutes and the eluted DNA/RNA is ready-to-use for subsequent reactions.

### Features

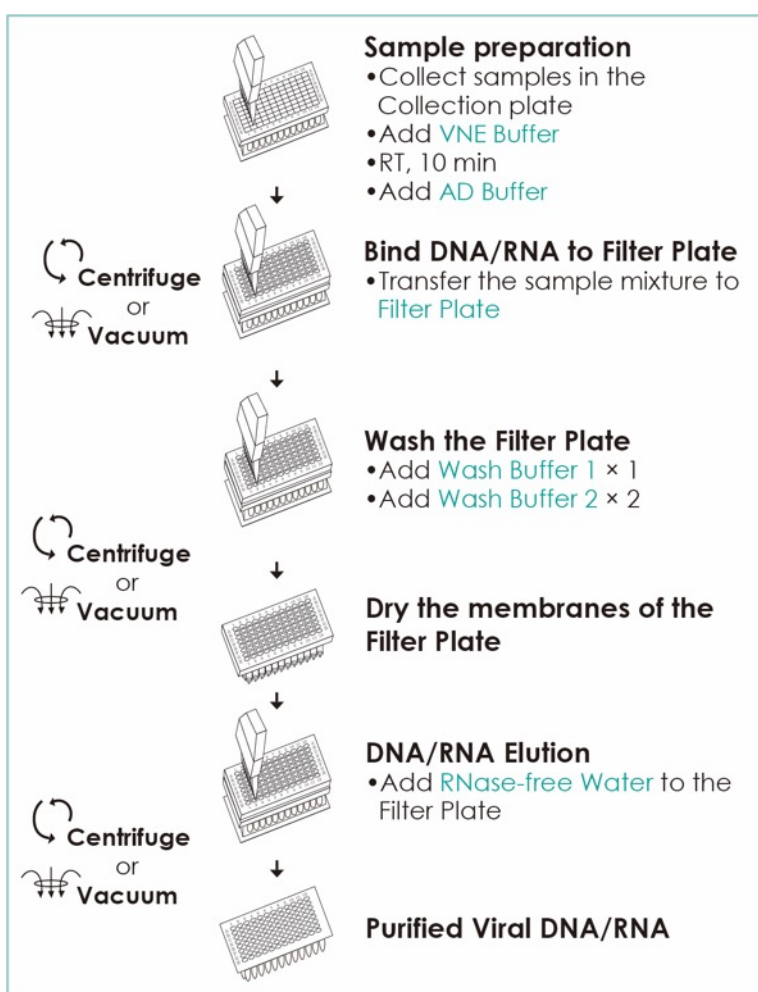
- ★**High Recovery:** Unique buffers are provided for samples with higher viral load.
- ★**High Purity:** Complete removal of contaminants and inhibitors for reliable downstream applications.
- ★**High Speed:** The procedure allows parallel purification of up to 96 samples and rapid purification of high-quality viral DNA and RNA within 60 minutes.

### Specifications

- Format/Principle:** Filter plate (silica membrane)
- Sample Size:** Up to 200 µl serum, plasma, body fluids and the supernatant of cell cultures.
- Plate Applicability:** Vacuum or centrifugation
- Operation Time:** <60 minutes/96 preparations
- RNA Binding Capacity:** Up to 75 µg/well
- Elution Volume:** 50~75 µl

### Applications

PCR; RT-PCR; RT-qPCR.



### Ordering Information

Cat. No.	Product Name	Size	Contents
FAVRE 96001	FavorPrep™ 96-Well Viral DNA/RNA Extraction Kit	1 plate	VNE Buffer
FAVRE 96002		2 plates	AD Buffer (Concentrated)
FAVRE 96004		4 plates	Wash Buffer 1 (Concentrate)
			Wash Buffer 2 (Concentrate)
			RNase-free Water
			Filter Plate (96-Well DNA/RNA Binding Plate)
			Collection Plate (96-Well 2 ml Plate)
			Elution Plate (96-Well PCR Plate)
			Adhesive Film

### Procedure

In this procedure, both vacuum and centrifugation method are compatible. The method utilizes chaotropic salt buffer (VNE) to lyse DNA/RNA viruses quickly and efficiently. Ethanol-contained AD Buffer optimizes the binding condition and improves the binding ability of viral DNA or RNA to the silica membrane. The DNA/RNA is absorbed to the silica fiber matrix in each well of the plate. After washing off contaminants (Wash Buffer 1 & 2), the purified viral DNA/RNA is eluted by low-salt buffer or water.



# REAGENT SERIES

## FavorPrep™ Tri-RNA Reagent (FATRR)

### Description

FavorPrep™ Tri-RNA Reagent is a ready-to-use reagent for quick and high-quality one-step RNA isolation. The Tri-RNA Reagent is a mono-phase solution composed of phenol and guanidine isothiocyanate. This reagent mainly designed for total RNA purification, and it is also allowed to isolate DNA and protein. During sample homogenization and lysis, this reagent maintains the integrity of RNA even the smallest molecular size. The isolated RNA can be used in various downstream applications.

### Features

- ★**Compatible:** Single step for the isolation of total RNA from tissues, cells, bacteria, plants, yeasts and biological fluids.
- ★**Rapid:** The whole process is less than 1 hour.
- ★**Convenience:** Available for the isolation of RNA, DNA and protein.
- ★**High Quality:** The purified RNA can be applied for multiple applications.

### Specifications

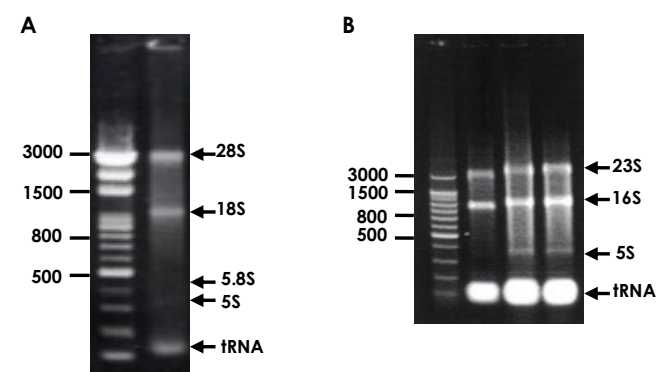
**Format/Principle:** Organic extraction.

**Sample Size:** Up to  $5 \times 10^6$  culture cells; up to 100 mg tissue.

**Operation Time:** Within 60 minutes.

### Applications

RT-qPCR; Northern blotting hybridization; primer extension;

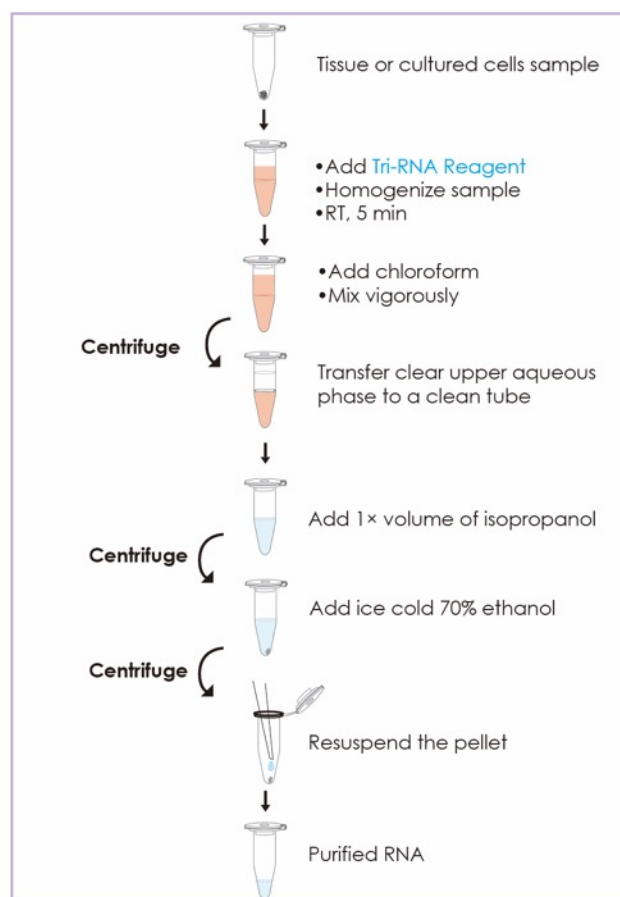


**Figure A.** Total RNA purified from human adipocytes using Tri-RNA Reagent.

**Figure B.** Total RNA purified from *E. coli* cells using Tri-RNA Reagent.

### Ordering Information

Cat. No.	Product Name	Size
FATRR 001	FavorPrep™ Tri-RNA Reagent	100 ml/bot
FATRR 002		50 ml/bot



### Procedure

The biological sample is homogenized with the Tri-RNA Reagent. After mixing evenly with chloroform, the homogenate separates into three phases (the clear aqueous on top; interphase; the bottom red organic phase). The RNA remains exclusively in the aqueous phase; DNA remains in the interphase; proteins remain in the organic phase. After transferring RNA contained aqueous phase solution into a new eppendorf, RNA precipitation is performed through adding isopropanol. The purified RNA is pelleted by high-speed centrifuge. Finally, wash pellet with ethanol and dissolve RNA pellet in RNase-free water.

# REAGENT SERIES

## FavorPrep™ RNA Stabilization Solution (FARSS)

### Description

The FavorPrep™ RNA Stabilization Solution is designed for RNA extraction from biological samples and obtaining high-quality, integrated RNA. Typically, to isolate high-quality RNA from tissues or cells, the samples should be processed immediately after harvest. The RNA Stabilization Solution makes it possible for researchers to extend the storage time of samples which planning for RNA isolation. In addition, the modified single-step method allows isolation of RNA from tissues or cells within one hour and makes it possible to process batch of samples simultaneously.

### Features

- ★**Rapid:** Fast storage tissues or cells; extract RNA within 1 hour.
- ★**Stable RNA:** Tissue and cell RNA are stabilized for long-term storage.
- ★**Easy to Use:** Mix with sample directly.

### Specifications

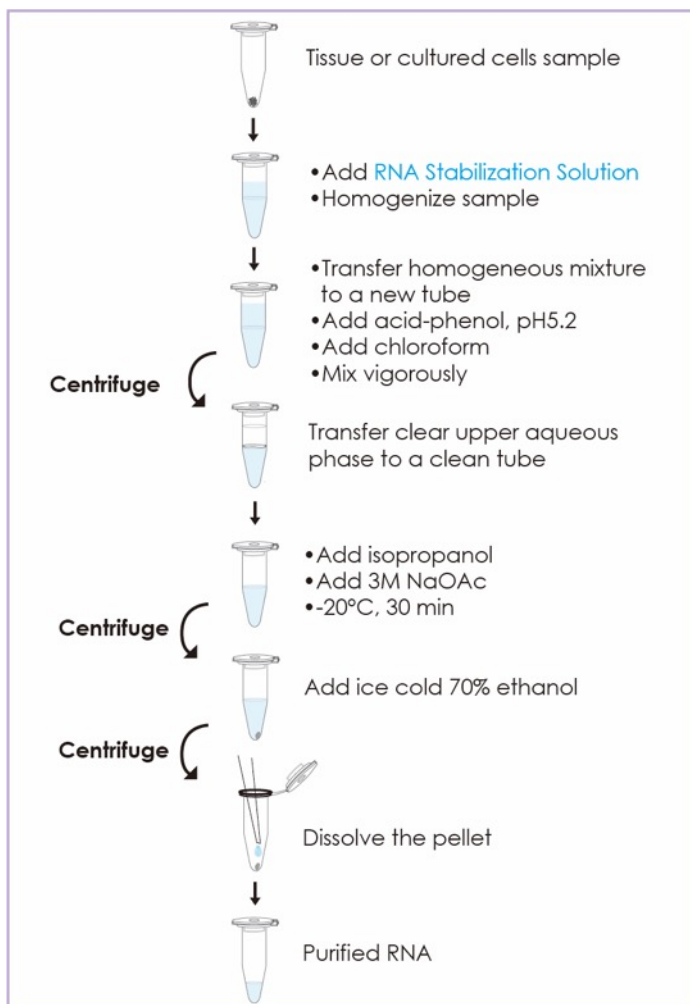
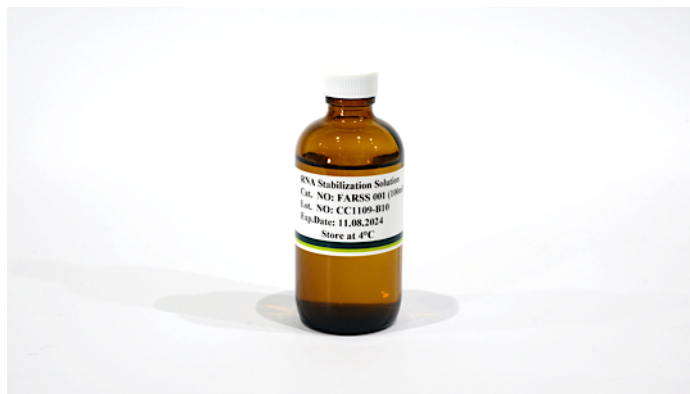
**Format/Principle:** Organic extraction

**Sample Size:** Up to  $1 \times 10^7$  culture cells; up to 100 mg tissue.

**Operation Time:** Within 60 minutes

### Applications

RT-qPCR; Northern blotting hybridizations; primer extension; cDNA synthesis; mRNA selection; *in vitro* translation; microarray.



### Ordering Information

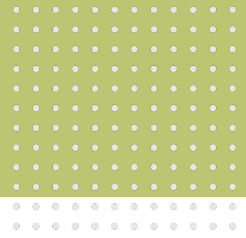
Cat. No.	Product Name	Size
FARSS 001	FavorPrep™ RNA Stabilization Solution	100 ml

### Procedure

A biological sample can be long-term stored in the RNA Stabilization Solution contained environment. For RNA extraction, transfer the sample/RNA stabilization solution mixture to a new tube. After the acid phenol/chloroform treatment and centrifuge, the homogenate separates into two phases (RNA remains in the aqueous phase while DNA and proteins are extracted into the organic phase). After transferring RNA contained aqueous phase solution into a new tube, RNA precipitation is performed through adding isopropanol and 3M NaOAc. The RNA pellet is washed with ethanol and dissolved in RNase-free water.



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